Mountain Vistas Specific Plan
and
Environmental Impact Report

Part II: Environmental Impact Report

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MOUNTAIN VISTAS SPECIFIC PLAN
AND
ENVIRONMENTAL IMPACT REPORT

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PURPOSE STATEMENT

The overall objective of the proposed project is to provide additional development opportunities in Chalfant in a manner that enhances community life and which implements existing General Plan goals, objectives and policies for the area. Specific project objectives include:

- Increasing the amount of single-family housing in Chalfant in an area adjacent to the existing community in order to minimize impacts to surrounding agricultural lands and public lands.
- Providing additional infill development between the existing developed areas east and west of Hwy. 6 in order to create a more cohesive community.
- Providing an additional site for small-scale commercial development to serve local needs.
- Creating a core commercial area in Chalfant along Hwy. 6 in the immediate vicinity of Brown's Subdivision Road and Chalfant Road.
- Increasing residential density in order to permit the efficient delivery of services such as fire protection, to allow for easier pedestrian and bicycle access throughout the community, and to create a sufficient population base to help support a local school.
- Providing additional infill development along Hwy. 6, at a greater single-family density, in order to help develop a "Main Street" along Hwy. 6 through the community of Chalfant.

The project applicants intend to provide 47 single-family residences, along with a site for small-scale commercial development and all required infrastructure and utilities for the proposed development, on a parcel located at the northwest corner of Hwy. 6 and Chalfant Road in Chalfant.

PROJECT COMPONENTS

The proposed development for the Mountain Vistas Specific Plan includes the following components:

1. Subdivision of a 28.95-acre parcel (APN 26-210-37) into forty-seven (47) single-family residential lots (gross density of 0.5 acres), one (1) commercial lot (approximately 2 acres), and six utility and open space lots to be used for wells, water storage, propane storage, stormwater retention, a park area and landscaping. Tract Map Application 37-54 addresses the subdivision of the property.

2. Designation of the project site as Specific Plan (SP), including Single-family Residential (SFR) with a half-acre gross density and a minimum lot size of 0.36 acres, Commercial (C), Utility (U), and Open Space (OS). Ten (10) lots along the western edge of the project also have an Equestrian overlay (E) designation. An application for a General Plan Amendment (GPA 03-02) addresses the redesignation of the parcel from Estate Residential (ER) to the Specific Plan land use designations.

3. Development of required infrastructure on site, including paved two-lane roads, a domestic and fire protection water system (wells, water distribution and storage system, fire hydrants), a propane tank yard and propane distribution system, a storm drainage system, an underground electrical, telephone, and cable TV distribution system, and individual septic systems for all lots. On-site infrastructure improvements will be developed in phases by Workforce Homebuilders LLC.

4. The commercial lot would be developed by the current property owner. The residential lots would be developed by Workforce Homebuilders LLC in two consecutive phases. Workforce Homebuilders LLC intends to install factory-built housing assembled on site on an engineered load bearing foundation system. They intend to provide three floor plans and two exterior elevations per floor plan. Housing materials and colors are intended to blend aesthetically into the surrounding environment. Development of the site would include a landscaping buffer between Hwy. 6 and the project and additional landscaping throughout the project site.

5. The project will be privately funded.

LOCATION

The project site is a 28.95-acre parcel located in the southeast corner of Mono County, California, approximately 13 miles north of Bishop, California (see Figure 1, Regional Map and Vicinity Map in Appendix A, Map Set). The site is located in the community of Chalfant in the Tri-Valley, adjacent to the northwest corner of the intersection of Hwy. 6 and Chalfant Road.

The parcel is located in the E 1/2 NE 1/4 Sec. 8, T.5S, R.33E, M.D.B.M. on the USGS 7.5 minute quadrangle map "Chidago Canyon." The Mono County Assessor's Parcel Number is 26-210-37. The Mono County Land Use Maps showing the parcel are Figure 96, Chalfant Valley Area, and Figure 97, Chalfant Community North.

RANGE OF ISSUES

The range of issues identified for the proposed project includes the following:

1. The General Plan designation for the parcel is Estate Residential (ER), which has a one (1)-acre minimum lot size (Mono County Land Use Maps, Figure 97--Chalfant Community North). The Mono County Land Use Element also states, "Gross densities for residential development in Chalfant shall not exceed one (1) dwelling unit per acre. For parcels ten (10) acres or greater, clustering shall be encouraged" (Mono County Land Use Element, Tri-Valley policies, Objective C, Action 2.1). The gross density for the proposed single-family residences is one (1) dwelling unit per half-acre. The proposed change in lot size and density requires a General Plan Amendment.

2. There are a number of issues relating to water; i.e.,
   - water consumption by the project;
   - impacts on existing wells and the surrounding water table;

- water pressure/fireflow issues;
- septic system impacts on water quality; and
- potential cumulative water quantity and quality impacts in the area.

3. There are potential flooding and storm drainage issues in the project area.

4. Forty-seven additional residences and one additional commercial lot would create traffic impacts on Hwy. 6 and on Chalfant Road.

5. Since the proposed project is adjacent to Hwy. 6, there could be noise impacts to the project from the traffic on the highway, particularly from the truck traffic. Construction-related noise impacts could also be an issue.

6. There are aesthetic issues related to the rural character of the area; i.e.,
   - the project should "preserve the rural character and setting of Chalfant" (Mono County Land Use Element, Tri-Valley policies, Objective B, Policy 2); and
   - the "look" of the development should remain rural (development layout, building styles and noise-attenuation wall).

7. The proposed project site is in an area identified in the Mono County Master Environmental Assessment (MEA Figure 18 F) as being subject to wind erosion. This would be a concern both during the construction/development process and on an ongoing basis.

8. Forty-seven additional residences and one additional commercial lot, and the resulting increase in population, could create impacts to public services (transfer station, schools, phone lines, mail) and emergency services (paramedic, fire protection, sheriff) in the area.

SUMMARY OF PREPARATION PROCESS

The Mountain Vistas Specific Plan and EIR was prepared by a consultant utilizing comments from a public scoping meeting held in Chalfant on November 5, 2003, review of related technical literature and data, evaluation of the project plan documents, review of local plans and policies including the Mono County General Plan and Land Development Regulations, consultation with interested agencies and individuals, and incorporation of special studies prepared for the Specific Plan (traffic, noise, hydrogeology, flooding). An administrative draft was reviewed by Mono County staff and revised by the consultant.

SPECIFIC PLAN IMPLEMENTATION & MONITORING

Policies in the Specific Plan will be implemented through the design and conservation standards established in the plan. Those standards incorporate suggested mitigation measures from the special studies (traffic, noise, hydrogeology, flooding) prepared for the project as well as mitigation from the county's General Plan and Land Development Regulations. The design and conservation standards also incorporate proposed mitigation measures resulting from the analysis in the Draft Environmental Impact Report for the Specific Plan. Implementation of the

portions of the Specific Plan will also be achieved through the tract map process and conditions of approval for the tract map. Implementation and monitoring of the Specific Plan are outlined in detail in Chapter VII, Specific Plan Enforcement.

SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

The DEIR identifies two potentially significant unavoidable environmental effects of the project that cannot be reduced to a less-than-significant level; mitigation measures proposed in the DEIR will reduce these impacts to the lowest feasible levels.

1. Visual Resources; and
2. Hazards—flooding.

The DEIR identifies seven potentially significant environmental effects of the project that, with mitigation, can be reduced to less-than-significant levels.

1. Public Service Impacts (schools, police, fire, emergency medical services, recreation);
2. Geology/Soils Impacts;
3. Circulation Impacts (turn volume increases and safety concerns);
4. Noise Impacts;
5. Air Quality Impacts;
6. Water Resource Impacts; and
7. Hazards—fire.

All other impact areas are not potentially significant; mitigation measures are proposed in the DEIR for several of these impact areas to reduce impacts to even lower levels.

SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The project would result in the conversion of 29 acres of previously disturbed sagebrush scrub to housing, roads, and small-scale commercial development. The project would utilize on-site septic systems and wells. Once the site is developed with residential uses it is unlikely that those uses would change. The site has been used in the past for agriculture; it is unlikely that the housing would be removed in the future so that the site could be used again for agriculture.

This change is not significant, however, because the site is designated for residential uses in the Mono County General Plan, it is adjacent to existing residential and commercial development in Chalfant, and is adjacent to existing, paved roads (Hwy. 6, Chalfant Road). It is not adjacent to other parcels designated for agriculture.

GROWTH-INDUCING IMPACTS

Chalfant is primarily a residential community with extremely limited commercial and agricultural facilities and no industrial or manufacturing sites. As data from the 2000 Census indicate, most workers in Chalfant commute to jobs outside Chalfant, primarily in Bishop and

Mammoth Lakes. Although the project is anticipated to create some jobs, both during the construction phases of the project and over the life of the project, the number of jobs is anticipated to be small, and it is anticipated that most jobs will be taken by current residents of the area.

CUMULATIVE IMPACTS

The EIR identifies three environmental effects that may be cumulatively considerable as the result of planned projects in the Chalfant area, including the proposed project:

1. Public services (emergency medical, law enforcement, schools, fire);
2. Geology/Soils (erosion); and
3. Visual resource impacts.

ALTERNATIVES

The project analyzes six alternatives to the proposed project:

1. No Project Alternative: The project site would remain in its current condition.
2. Reduced Development: 26 residences on one- acre lots. No commercial development.
3. Reduced Development: 18 residences on one-acre lots. No commercial development.
4. Reduced Development: 34 residences on one-half-acre lots. One commercial lot. Park space.
5. Clustered Development: 48 residences on one-quarter-acre lots. One commercial lot. Approximately half the current lot would be park space.
6. Alternative Access: 49 residences on lots ranging from 0.31 acres to 0.6 acres. One commercial lot. Chalfant Road from Hwy. 6 to the western portion of the project site would be abandoned, and access to Hwy. 6 would be provided through the project site.

The alternatives reduce the identified impacts to varying degrees.

I. INTRODUCTION

PURPOSE OF THE EIR

CEQA requires lead agencies to prepare an Environmental Impact Report (EIR) in cases where a project may have a significant effect on the environment. As defined by CEQA (Guidelines Section 15121), an EIR is an informational document intended to:

- Inform public agency decision-makers and the public generally of the significant environmental effects of a project;
- Identify possible ways to minimize the significant effects; and
- Describe reasonable alternatives to the project.

The CEQA Guidelines require that EIRs contain specific elements (Guidelines Sections 15122-15132); i.e.,

- Table of Contents;
- Summary;
- Project Description;
- Environmental Setting;
- Consideration and Discussion of Environmental Impacts;
- Effects Not Found to be Significant;
- Consideration and Discussion of Significant Environmental Impacts;
- Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects;
- Consideration and Discussion of Alternatives to the Proposed Project;
- Discussion of Cumulative Impacts; and
- Organizations and Persons Consulted.

RELATONSHIP OF THE EIR TO THE SPECIFIC PLAN

The Mountain Vistas Environmental Impact Report (EIR) evaluates the potential impacts of the project on the environment. The associated Specific Plan contains development standards and implementation measures for the proposed residential and commercial project in Chalfant. Many of the proposed mitigation measures have been included in the Specific Plan as development standards and policies. Additional mitigation measures specified for the project can only be implemented or required by other agencies. The Specific Plan may also contain standards or requirements that go beyond environmental mitigation, such as construction standards, architectural standards, or other special features of development.

PROPONENT INFORMATION

The project proponents are Workforce Homebuilders, LLC/WF Fund II LLC, 10621 Civic Center Drive, Rancho Cucamonga, CA 91730, and Kathryn Brown of Chalfant (the property owner). The contact for the project is D. Anthony Mize, (909) 987-9191.

ACTIONS INITIATING THE EIR

The primary action initiating the preparation of the Mountain Vistas Specific Plan and Environmental Impact Report is the proponents' application to subdivide a 28.95-acre parcel in Chalfant (APN 26-210-37) into 47 single-family residential lots and one commercial lot. The project application includes the following elements required to implement the proposed project:

1. General Plan Amendment 03-02. A General Plan Amendment is required to change the existing land use designation on the parcel from Estate Residential (ER) to Specific Plan (SP) including Single-family Residential (SFR), Commercial (C), Equestrian Overlay (E), Utility (U), and Open Space (OS).

   The General Plan Amendment will also amend the following policy in the Mono County Land Use Element to read as follows (additions are noted in ***bold and italic*** print):

   > "Gross densities for residential development in Chalfant shall not exceed one (1) dwelling unit per acre, ***unless a Specific Plan and Environmental Impact Report are prepared for the proposed project, an on-site water system is included in the design for the proposed project, residential densities for the proposed project do not exceed one-half (½)-acre gross density, and the project site is located within or adjacent to the existing community of Chalfant with frontage on Hwy. 6***. For parcels ten (10) acres or greater, clustering shall be encouraged."
   >
   > (Mono County Land Use Element, Tri-Valley policies, Objective B, Action 2.1)

2. Tentative Tract Map 37-54 to subdivide APN 26-210-37 into forty-seven (47) single-family residential lots, one commercial lot, and six common utility and open space lots (to be utilized for wells, water storage, propane storage, stormwater retention, a park area and landscaping).

The "project" analyzed in the EIR is the development of the parcel with roads, utilities, single-family residences, commercial development and landscaping. The full project description is presented in the Mountain Vistas Specific Plan.

INTENDED USES OF THE EIR

Public Agencies Expected to Use the EIR

Mono County, as the lead agency for the project, is responsible for processing and considering approval of the Mountain Vistas Specific Plan, the General Plan Amendment, and the Tentative Tract Map. The County is also responsible for certifying the adequacy of the EIR. Other agencies that may be required to act on the project or issue permits include:

1. Great Basin Unified Air Pollution Control District (GBUAPCD);
2. Lahontan Regional Water Quality Control Board (LRWQCB);
3. California Department of Transportation (Caltrans);
4. Chalfant Valley Fire Protection District;
5. Mono County Department of Public Works;
6. Mono County Environmental Health; and

7. Mono County Building Division.

Permits and Approvals Required to Implement the Project

The following additional permits and approvals may be required to implement the project:

Lahontan Regional Water Quality Control Board: NPDES permit [required for projects disturbing more than one (1) acre.]
Caltrans: Encroachment permit for Hwy. 6 access and approval of traffic mitigation measures on Hwy. 6 such as acceleration/deceleration lanes.
Chalfant Valley Fire Protection District: Approval of fire suppression system/design.
Mono County Department of Public Works: Grading permit and approval of storm drainage system. Encroachment permit for Chalfant Road access.
Mono County Environmental Health: Well permit and approval of water storage and distribution system. Approval of individual septic systems for each of the proposed residences and the commercial lot.
Mono County Building Division: Building permits for residences and commercial structures.

METHODOLOGY

The environmental analysis in this document is based on comments from scoping meetings, comments received in response to the Notice of Preparation, review of related technical literature and data, evaluation of the project plan documents, review of relevant local plans including the Mono County General Plan and Master Environmental Assessment, consultation with interested agencies and individuals, and review of special technical studies prepared for the project.

The Appendices contain copies of the Notice of Preparation, comments from scoping meetings, copies of the technical studies prepared for the project, and a complete Map Set for the project.

II. PROJECT DESCRIPTION

PROJECT LOCATION

The project site is a 28.95-acre parcel located in the southeast corner of Mono County, California, approximately 13 miles north of Bishop, California (see Figure 1, Regional Map and Vicinity Map in Appendix A, Map Set). The site is located in the community of Chalfant in the Tri-Valley, adjacent to the northwest corner of the intersection of Hwy. 6 and Chalfant Road.

The parcel is located in the E 1/2 NE 1/4 Sec. 8, T.5S, R.33E, M.D.B.M. on the USGS 7.5 minute quadrangle map "Chidago Canyon." The Mono County Assessor's Parcel Number is 26-210-37. The Mono County Land Use Maps showing the parcel are Figure 96, Chalfant Valley Area, and Figure 97, Chalfant Community North.

SITE CHARACTERISTICS

The project site is a relatively flat open parcel of land with an existing mobile home, two wells, a septic system and a paved driveway. Access to the site is from Hwy. 6 and Chalfant Road. Vegetation on site is scattered sagebrush scrub with approximately six trees located near the existing mobile home. The site was previously used for agriculture (alfalfa from 1948-1981 and potatoes from 1981-1982) but has not been in agricultural production since 1982. Figure 1 provides an aerial view of the site.

SURROUNDING LAND USES

Land use in the area surrounding Chalfant is primarily open space and agriculture. Community areas on both sides of Hwy. 6 are surrounded by land owned by the Los Angeles Department of Water and Power (LADWP). That land is designated Open Space (OS) and is maintained as open space by LADWP to protect its water resources. Farther east and west of the community areas the land is public land managed by the Bureau of Land Management (BLM). Those lands are primarily managed for habitat conservation and dispersed recreation.

Land surrounding the project site includes LADWP lands designated Open Space (OS) to the south, west and north, a 3-acre parcel to the immediate north designated Service Commercial (SC) that is utilized for heavy equipment and truck repair, and single-family residential development designated Rural Mobile Home (RMH) across Hwy. 6 to the east. There is also a one-acre commercial site with a small store across Hwy. 6 to the east and a county park facility across Hwy. 6 at the southeast corner of the project site.

FIGURE 1:
AERIAL PHOTO OF THE SITE

PROJECT OBJECTIVES

The overall objective of the proposed project is to provide additional development opportunities in Chalfant in a manner that enhances community life and which implements existing General Plan goals, objectives, and policies for the area. Specific project objectives include:

- Increasing the amount of single-family housing in Chalfant in an area adjacent to the existing community in order to minimize impacts to surrounding agricultural lands and public lands.
- Providing additional infill development between the existing developed areas east and west of Hwy. 6 in order to create a more cohesive community.
- Providing an additional site for small-scale commercial development to serve local needs.
- Creating a core commercial area in Chalfant along Hwy. 6 in the immediate vicinity of Brown's Subdivision Road and Chalfant Road.
- Increasing residential density in order to permit the efficient delivery of services such as fire protection, to allow for easier pedestrian and bicycle access throughout the community, and to create a sufficient population base to help support a local school.
- Providing additional infill development along Hwy. 6, at a greater single-family density, in order to help develop a "Main Street" along Hwy. 6 through the community of Chalfant.

The project applicants intend to provide 47 single-family residences, along with a site for small-scale commercial development and all required infrastructure and utilities for the proposed development, on a parcel located at the northwest corner of Hwy. 6 and Chalfant Road in Chalfant.

PROJECT DESCRIPTION

The proposed development for the Mountain Vistas Specific Plan includes the following components:

1. Subdivision of a 28.95-acre parcel (APN 26-210-37) into forty-seven (47) single-family residential lots (gross density of 0.5 acres), one (1) commercial lot (approximately 2 acres), and six utility and open space lots to be used for wells, water storage, propane storage, stormwater retention, a park area and landscaping. Tract Map Application 37-54 addresses the subdivision of the property.

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3. Development of required infrastructure on site, including paved two-lane roads, a domestic and fire protection water system (wells, water distribution and storage system, fire hydrants), a propane tank yard and propane distribution system, a storm drainage system, an underground electrical, telephone, and cable TV distribution system, and individual septic

systems for all lots. On-site infrastructure improvements will be developed in phases by Workforce Homebuilders LLC.

5. The commercial lot would be developed by the current property owner. The residential lots would be developed by Workforce Homebuilders LLC in two consecutive phases. Workforce Homebuilders LLC intends to install factory-built housing assembled on site on an engineered load bearing foundation system. They intend to provide three floor plans and two exterior elevations per floor plan. Housing materials and colors are intended to blend aesthetically into the surrounding environment. Development of the site would include a landscaping buffer between Hwy. 6 and the project and additional landscaping throughout the project site.

5. The project will be privately funded.

RELATIONSHIP WITH LOCAL AND REGIONAL PLANS

The proposed project is being analyzed in relation to local and regional plans, including the following:

- Water Quality Control Plan for the Lahontan Region (Basin Plan);
- Great Basin Unified Air Pollution Control District regulations;
- Chalfant Valley Fire Protection District Sphere of Influence Report;
- Mono County Regional Transportation Plan (RTP);
- Caltrans District 9 planning documents -- Route Concept Reports, Route Development Plans, and District System Management Plans; and
- Mono County General Plan.

III. ENVIRONMENTAL ANALYSIS

PURPOSE OF THE ANALYSIS

The purpose of the environmental analysis is to determine if there are any potentially significant impacts on the environment resulting from the implementation of the project. The analysis includes proposed mitigation measures that can reduce or eliminate any such impacts. The analysis discusses alternatives to the proposed project, reviews potential growth-inducing impacts and cumulative impacts, and identifies significant unavoidable adverse environmental impacts.

Mitigation measures incorporated into the DEIR serve as development standards, design standards, and conservation standards for the proposed Mountain Vistas Specific Plan.

ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

LAND USE

LAND USE SETTING

Chalfant is one of three residential communities located in the Tri-Valley, a north-south trending valley, relatively flat in the middle, bounded to the east by the White Mountains and to the west by the southeast sloping lava flows of the Volcanic Tablelands and the Benton Range. Outside of community areas, most of the land in the Tri-Valley is public land managed by the Bureau of Land Management (BLM). In the southern portion of the valley, including the Chalfant area, the Los Angeles Department of Water and Power (LADWP) owns large parcels of land.

The predominant land uses in the vicinity of Chalfant are residential, agricultural, and open space utilized primarily for dispersed recreation. In addition to residential development, Chalfant has a small store and community facilities including a community center, a park, a solid-waste transfer station, and a fire station.

Residential property in Chalfant is a mix of half-acre lots, one-acre lots and larger lots designated Rural Mobile Home (RMH) or Estate Residential (ER). Of the 164 lots designated RMH in Chalfant, 99 lots (60%) are 0.5 acres or less, 13 lots (8%) are 0.5 to 1 acre, and 57 lots (32%) are 1 acre or more. Figure 2 shows the location of various sized lots in Chalfant.

The intent of the RMH designation is to:

> "Provide for development in rural areas within the county consistent with developed lifestyles when mixed uses are determined to be acceptable to the citizens of the RMH area. The RMH district is further intended to provide for mixed uses including single-family residences, mobile homes used as residences, and small-scale agricultural uses

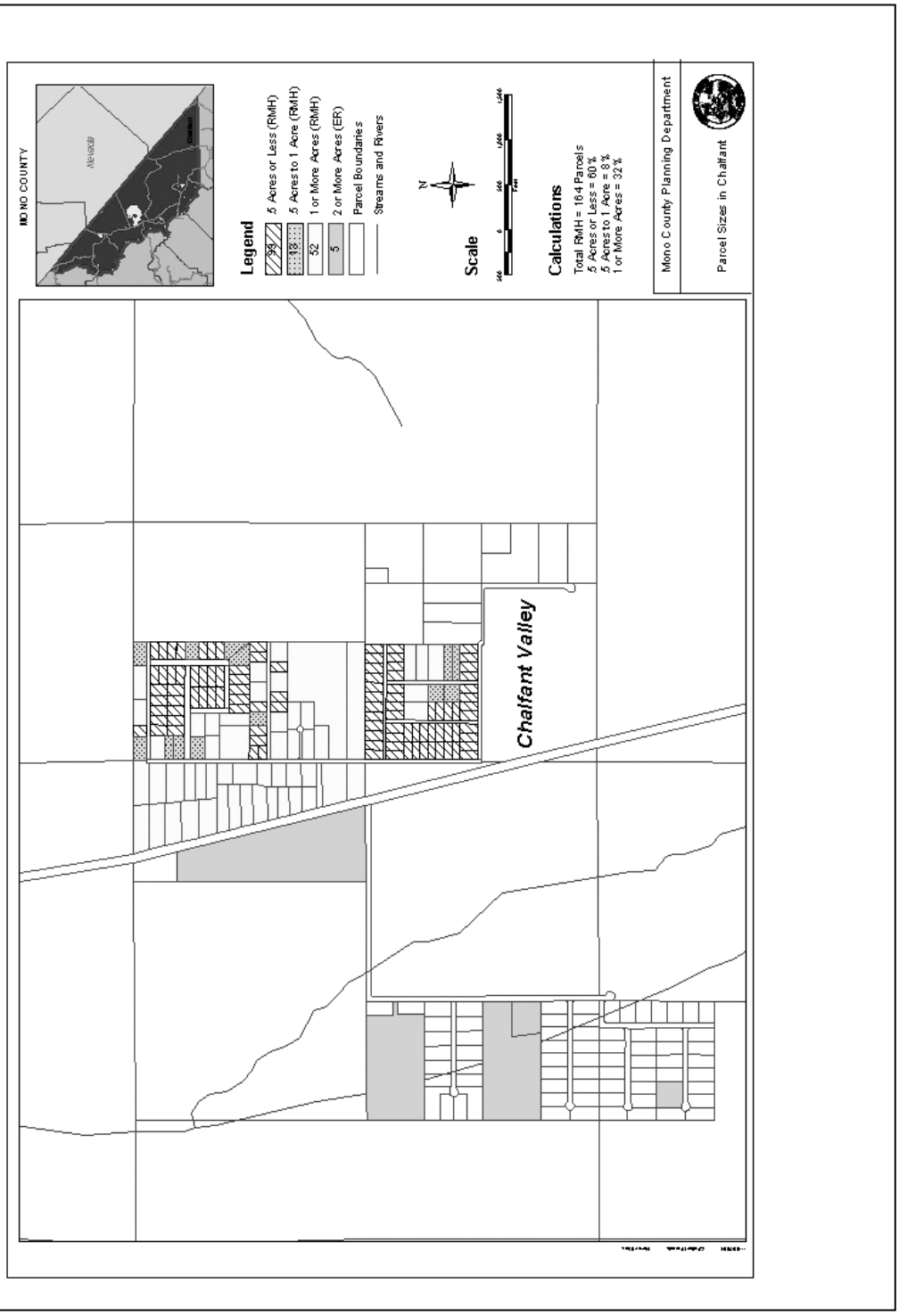

FIGURE 2:
PARCEL SIZES IN CHALFANT (RMH & ER PARCELS)

including the keeping of fowl and animals for personal use" (Mono County Land Use Element, Rural Mobile Home Designation).

The intent of the ER designation is to:

> "Permit large-lot, single-family dwelling units with ancillary rural uses in areas adjacent to developed communities. Small-scale agriculture is permitted for personal use only" (Mono County Land Use Element, Estate Residential Designation).

Both designations allow mobile homes to be used as single-family residences, small-scale agriculture for personal use, and animals and pets as allowed by the Mono County Animal Standards (Section 04.270 of the Land Development Regulations).

Land use in the area surrounding Chalfant is primarily open space and agriculture. Community areas on both sides of Hwy. 6 are surrounded by land owned by the Los Angeles Department of Water and Power (LADWP). That land is designated Open Space (OS) and is maintained as open space by LADWP to protect its water resources. Farther east and west of the community areas, the land is public land managed by the Bureau of Land Management (BLM). Those lands are primarily managed for habitat conservation and dispersed recreation.

Land surrounding the project site includes LADWP lands designated Open Space (OS) to the south, west and north, a 3-acre parcel to the immediate north designated Service Commercial (SC) that is utilized for heavy equipment and truck repair, and single-family residential development designated Rural Mobile Home (RMH) across Hwy. 6 to the east. There is also a one-acre commercial site with a small store across Hwy. 6 to the east and a county park facility across Hwy. 6 at the southeast corner of the project site.

LAND USE IMPACTS

The proposed project would provide 47 single-family residences and small-scale commercial development to meet local needs adjacent to existing development and existing roads and highways in Chalfant. The location of additional residential development on a parcel adjacent to existing development in Chalfant is consistent with Tri-Valley Area Plan policies that encourage residential development in areas where the proposed development would minimize impacts to surrounding agricultural lands and public lands.

The location of small-scale commercial uses at the corner of Hwy. 6 and Chalfant Road is consistent with Tri-Valley Area Plan policies that encourage the use of land adjacent to Hwy. 6 in Chalfant for commercial uses that serve local needs. The addition of local commercial uses at the intersection of Hwy. 6 and Chalfant Road will contribute to the creation of a core commercial area in Chalfant and to the development of a "Main Street" along Hwy. 6 in Chalfant. The development of a "Main Street" along Hwy. 6 will create a more cohesive community with a more noticeable presence along the highway that in turn may help to slow traffic along Hwy. 6 through the community.

Providing additional infill development between the existing developed areas east and west of Hwy. 6 will also help create a more cohesive community and will be consistent with Tri-Valley Area Plan policies that promote the preservation of agricultural lands and the avoidance of incompatible land uses, such as residential uses, in areas adjacent to agricultural lands. A more cohesive community will enhance community life in Chalfant by providing greater ease of access and greater connectivity between various areas of Chalfant.

Concentrating development in an area adjacent to the existing development in Chalfant and increasing residential density to that found elsewhere in Chalfant reduces the overall amount of land in the area utilized for residential uses and allow services to be provided more efficiently while providing additional housing opportunities to meet the increasing housing demand in Mono County.

There are some concerns about the proposed lot size. Tri-Valley Area Plan policies currently require gross densities for residential development in Chalfant not to exceed one dwelling unit per acre. The site and the project have been analyzed and a smaller lot size was determined to be appropriate for the site because the project site is adjacent to existing roads and highways and it is adjacent to the existing community of Chalfant which has several areas with ½-acre or smaller lots. Smaller lot sizes would also allow more houses to be built in an area adjacent to Chalfant in order to preserve agricultural lands elsewhere in the area.

The proposed development appears to be consistent with the existing development in Chalfant that is ½ acre or smaller in size. Of the 164 lots designated RMH in Chalfant, 99 lots (60%) are 0.5 acres or less, 13 lots (8%) are 0.5 to 1 acre, and 57 lots (32%) are 1 acre or more.

Outside of community areas in Mono County, a one-acre lot size has generally been established because that is the smallest size lot that can accommodate both an individual well and an individual septic system. The Chalfant Valley Fire Protection District required a water system for the proposed development; that requirement allows smaller lot sizes to be developed.

The proposed General Plan Amendment required to allow a ½-acre lot size would amend the following policy in the Mono County Land Use Element to read as follows (additions are noted in ***bold and italic*** print):

> "Gross densities for residential development in Chalfant shall not exceed one (1) dwelling unit per acre, ***unless a Specific Plan and Environmental Impact Report are prepared for the proposed project, an on-site water system is included in the design for the proposed project, residential densities for the proposed project do not exceed one-half (½) acre gross density, and the project site is located within or adjacent to the existing community of Chalfant with frontage on Hwy. 6***. For parcels ten (10) acres or greater, clustering shall be encouraged."
>
> (Mono County Land Use Element, Tri-Valley policies, Objective B, Action 2.1)

The amendment would affect only the proposed project site in Chalfant and would not affect other large undeveloped lots in the Chalfant area. If it did apply to other parcels in the Chalfant area, densities in the area could change from those currently approved in the General Plan and land use could be significantly impacted.

Currently, the maximum potential buildout allowed by the General Plan for the Chalfant Valley area is 661 dwelling units, 365 units in the Rural Mobile-home designation, 109 units in the Estate Residential designation, and the remaining 187 units in a variety of non-residential designations (Open Space **--** LADWP, Agriculture, Resource Management, and Commercial).

The proposed increase in density would result in 19 additional dwelling units in Chalfant Valley over the 661 currently allowed by the General Plan, an increase of 3% (Note: The ½-acre gross

density actually entitles the proponents to develop 54 residential lots on the 27 acres designated for residential uses; the proponents are proposing to develop 47 residential units). If those 19 additional units were dispersed throughout Chalfant Valley the impacts from those units could be significant:

- Dispersed residences could have 19 additional wells.
- The visual impact of scattered development could be perceived as greater than that of concentrated development.
- Dispersed development results in the inefficient delivery of services and the need for additional roads.
- Dispersed residential development could result in greater incompatibility between agricultural uses and non-agricultural uses.
- Continuing to fragment development in Chalfant would not help to develop a cohesive community.

The proposed increase in density on the project site, on a lot within the developed community of Chalfant, avoids the potential impacts noted above while providing the potential benefits to the community and the County noted in previous paragraphs; i.e., additional housing opportunities, infill to link the existing developed areas of Chalfant, and more efficient provision of services.

The proposed increase in density in Chalfant is also consistent with recent amendments to California State Planning Law that identify planning priorities for the state that include infill, the protection of environmental and agricultural resources, and efficient development patterns; i.e.,

65041.1. The state planning priorities, which are intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety in the state, including in urban, suburban, and rural communities, shall be as follows:

(a) To promote infill development and equity by rehabilitating, maintaining, and improving existing infrastructure that supports infill development and appropriate reuse and redevelopment of previously developed, underutilized land that is presently served by transit, streets, water, sewer, and other essential services, particularly in underserved areas, and to preserving cultural and historic resources.

(b) To protect environmental and agricultural resources by protecting, preserving, and enhancing the state's most valuable natural resources, including working landscapes such as farm, range, and forest lands, natural lands such as wetlands, watersheds, wildlife habitats, and other wildlands, recreation lands such as parks, trails, greenbelts, and other open space, and landscapes with locally unique features and areas identified by the state as deserving special protection.

(c) To encourage efficient development patterns by ensuring that any infrastructure associated with development, other than infill development, supports new development that does all of the following:

(1) Uses land efficiently.
(2) Is built adjacent to existing developed areas to the extent consistent with the priorities specified pursuant to subdivision (b).
(3) Is located in an area appropriately planned for growth.
(4) Is served by adequate transportation and other essential utilities and services.
(5) Minimizes ongoing costs to taxpayers.

CONCLUSION

The project could result in significant impacts to land use in Chalfant if the proposed General Plan Amendment applied throughout the community. Limiting the General Plan Amendment to the proposed project site avoids potential significant land use impacts since the project has been designed to avoid those impacts by concentrating development in an area adjacent to existing development, providing infill development between the existing development east and west of Hwy. 6, and providing an on-site community water system for the project. No additional mitigation is required.

POPULATION, HOUSING, & EMPLOYMENT

POPULATION CHARACTERISTICS

Data on population characteristics in the Tri-Valley and Chalfant are from the 2000 U.S. Census and demographic data in the Mono County 2003 Housing Element.

The population in the Tri-Valley is similar to the overall population in the unincorporated areas of the county. The overall population is aging, from a median age of 33 in 1990 to 40 in 2000. The percentage of the overall population under age 5 decreased slightly while the percentage of the overall population aged 65 or older increased slightly. In 2000, approximately 20% of the Tri-Valley population was school-aged children and approximately 13% was senior citizens 65 and older. Both of these figures are higher than in other community areas in the unincorporated area.

The Hispanic population increased slightly between 1990 and 2000 and remains fairly evenly dispersed throughout the unincorporated area. Since 1980, the Tri-Valley area has continued to be home to approximately 16% to 17% of the overall population in the unincorporated area.

Population characteristics for the Tri-Valley are described in the following paragraphs. Data for Chalfant alone are often unavailable; they are included in overall figures for the Tri-Valley.

- In 2000, the total population of the Tri-Valley was 954 persons, approximately 17% of the county's total unincorporated population of 5,759 persons. Since 1980, the percentage of the unincorporated area population living in the Tri-Valley has remained fairly constant at 16-17 percent.
- Chalfant had a population of approximately 465 persons in 2000, approximately 49% of the total population in the Tri-Valley.
- The median age in the unincorporated area increased from 33 in 1990 to 40.1 in 2000. In the Tri-Valley, the median age was 42.9 in 2000.
- In 2000, the Tri-Valley had a slightly smaller percentage of children under age 5 than the overall percentage in the unincorporated area (5% in the Tri-Valley, 6% in the unincorporated area). The overall population of children under age 5 in the unincorporated area decreased from 8% to 6% of the total population between 1990 and 2000. The population of children under age 5 is fairly evenly distributed throughout the unincorporated area.
- In 2000, the population of children aged 5-17 in the Tri-Valley was 20% of its total population compared to 18% of the total population in the unincorporated area. The overall population of school-age children in the unincorporated area increased numerically between 1990 and 2000 but decreased from 19% to 18% of the total population. Compared to other community areas, the Tri-Valley had the highest percentage of its population in this age group; although

other community areas had a greater number of people this age, it was not such a high percentage of their overall population since their overall population was also higher.

- In 2000, adults aged 18-64 comprised 61% of the Tri-Valley's population compared to 65% of the unincorporated area's population. That segment of the unincorporated population remained fairly constant between 1990 and 2000, increasing from 63% of the total population in 1990 to 65% of the total population in 2000. The population of adults 18-64 was fairly evenly distributed throughout the unincorporated area.
- In 2000, senior citizens aged 65 or older made up 13% of the Tri-Valley's population compared to 12% of the unincorporated area's population. That segment of the unincorporated area population increased from 10% to 12% of the total population between 1990 and 2000. Compared to other community areas, the Tri-Valley had one of the higher percentages of its population in this age group and the third largest number of people in this age group.
- Between 1990 and 2000, the percentage of the population identifying themselves as Hispanic, of whatever race, remained relatively unchanged in the unincorporated area, rising from 11.3% of the population in 1990 to 12.4% of the population in 2000. This population is fairly evenly distributed throughout the county's communities; 11.22% of the Tri-Valley population identified itself as Hispanic in 2000. Anecdotal data indicates that the Hispanic population is employed throughout the county in service jobs and has continued to increase since the 2000 census.

HOUSING CHARACTERISTICS

Data on housing characteristics in Chalfant are available from two sources, the 2000 U.S. Census and the Eastern Sierra Housing Needs Assessment prepared in 2004. The Housing Needs Assessment utilized information from the U.S. Census and other public information sources, employee, household and employer surveys, realtors, lenders, property managers and employer interviews.

Housing in the Tri-Valley is single-family housing, a mix of traditional houses and mobile homes. Much of it is relatively new, with close to half of the housing built in the last 20 years. The Tri-Valley has a higher number of homeowners than other communities in the county but also more overcrowded households and more large households. The Mono County Housing Element, utilizing data from the 2000 Census, provides the following findings about housing in the Tri-Valley area.

- The Tri-Valley had 510 housing units in 2000, 279 detached single-family residences and 231 mobile homes, a somewhat higher percentage of mobile homes than in other county communities.
- The Tri-Valley has a higher percentage of homeowners (77 percent) versus renters (23 percent) than elsewhere in the county. Homeowners tend to be older, with many seniors.
- In 2003, the Mono County Community Development Department Housing Conditions Survey identified 167 housing units in the Tri-Valley as being in good condition, 116 units as being in fair condition, 51 units as being in poor condition, and 8 units as being vacant.
- 157 units (31%) in the Tri-Valley were built 10 or fewer years ago, 89 units (17%) were built 11-20 years ago, 107 units (21%) were built 21-30 years ago, 103 units (20%) were built 31-40 years ago, 28 units (5%) were built 41-50 years ago, and 26 units (5%) were built 51 or more years ago (Mono County Housing Element, Table 37);

- The Tri-Valley had 50 overcrowded households in 2000 (more than one person per room), more than any other planning area in the county and 40% of the total 125 overcrowded households in the county.
- The Tri-Valley had 56 large households in 2000 (five or more persons), 30 owner-occupied units and 26 renter-occupied units. Only Antelope Valley had a higher number of large households and the majority of those were renters at the Marine Corps Housing in Coleville.
- The Tri-Valley had 38 households overpaying for housing in 2000 (paying 30% or more of household income for housing), 25 owner-occupied households and 13 renter-occupied households. This is one of the lowest percentages of households overpaying in the county's communities (according to data from the 2000 Census).

The Eastern Sierra Housing Needs Assessment provides the following preliminary findings based on a combination of 2000 Census data and results from the household survey.

- This area has a relatively small percentage of units devoted to seasonal/recreational use (15%), but the number more than doubled since the 1990 Census which indicates more seasonal use will continue into the future.
- There was a modest increase in the number of units since 1990 (17.9%), however the total number of vacant units increased by over half and occupied units only increased by 8%. There was a substantial increase in owner-occupied units (from 67% to 79%), but there were fewer new households moving into this area in the 15 months prior to the 2000 Census than other areas.
- Of its housing stock, 231 units are mobile homes and 279 are single-family units. There are no multi-family units and almost all the homes are heated by LP gas or wood. This is consistent with a rural area.
- Home values increased 39%, and rents more than doubled from 1990 to 2000. Household income increased 71% during this period, indicating that for owners, income was increasing faster than housing values. The increase in home values reflects the large number of mobile homes in the area, and the median household income of $40,278 is well below the state ($47,493) and the county ($44,992).
- There are a lot of seniors in the area (23% of households), and they make up 26% of the owners. Families with children under 18 make up one-third of the households, which is higher than Mono County. Households predominantly consist of one and two persons (84%), and there are a fair number of single parents (10% of households).
- Paying too much for housing was a problem for 20% of households in the area. It appears that those earning less than 60% of the Area Mean Income (AMI) have the greatest difficulty with housing costs, yet there was only modest interest in rent assistance and little support for purchasing a deed restricted unit.
- Among owners, 44% want to buy a different home and 83% of renters would like to be owners. They are looking for midsize single-family homes or manufactured/mobile homes, although there was a fair amount of interest in smaller single-family units. Overall, they are looking for slightly larger homes than most of Mono County.
- When looking for a place, cost and size of the lot are very important, as is storage for equipment/vehicles. Proximity to employment is not as important to residents here than other places.
- Employees in the Tri-Valley area were more inclined to see housing as a serious problem (55%) than a critical problem (29%).

EMPLOYMENT AND INCOME CHARACTERISTICS

Data on employment and income characteristics in Chalfant are available from two sources, the 2000 U.S. Census and The Eastern Sierra Housing Needs Assessment prepared in 2004. The Housing Needs Assessment utilized information from the U.S. Census and other public

information sources, employee, household and employer surveys, realtors, lenders, property managers and employer interviews.

Employees in the Tri-Valley area tend to work outside the area, and a greater percentage of the population is self-employed and/or telecommutes a portion of their work week than in other areas of the unincorporated area. Over half of all workers travel to Bishop year round and approximately one quarter of all workers travel to Mammoth Lakes year round. The median household income in the Tri-Valley is in the middle for all communities in the unincorporated area. The Tri-Valley area has more retired people and more people receiving Social Security Income and Supplemental Security Income than other areas of the unincorporated area.

Employment in Mono County is heavily dependent on retail trade, services, and government (see Table 1). In the unincorporated areas of Mono County, services, construction and mining, and retail trade predominate, with agriculture, manufacturing, and transportation and public utilities employing a greater percentage of the population than in the entire county.

Table 1: Employment by Industry, Mono County

	Total Mono County	Unincorporated Area
Agriculture	0.2%	4.0%
Construction and Mining	6.2%	17.4%
Manufacturing	1.1%	3.4%
Wholesale Trade	0.3%	0.0%
Retail Trade	25.7%	10.5%
Finance, Insurance, Real Estate	7.9%	2.9%
Transportation, Public Utilities	1.8%	3.7%
Services	35.7%	47.1%
Government	21.3%	8.7%

Sources: County Snapshot: Mono 2002; U.S. Census 2000, Summary File 3, Table P49.

In 2000, of the 387 total workers in the Tri-Valley, 274 (71%) worked outside of Mono County, probably in Inyo County, and two worked outside of California (Mono County Housing Element, Table 28). No other planning area in Mono County has such a high percentage of residents working outside of the county. Mono Basin had 53 people (20% of all workers in that area who worked outside the county, while Long Valley/Wheeler Crest had 128 people (17% of all workers) who did so (Mono County Housing Element, Table 28).

Data from the 2000 U.S. Census indicate that over half of all workers in the Tri-Valley had a travel time to work of less than 30 minutes, indicating many in Chalfant probably worked in Bishop. Seven percent worked at home, 18% commuted 30-44 minutes one-way, 4% commuted 45-59 minutes, and 16% commuted over 60 minutes one way (Mono County Housing Element, Table 29). Data from the Eastern Sierra Housing Needs Assessment indicate that:

> Residents commute throughout the area. Roughly 51% go to Bishop in both the summer and winter season and 27% go to Mammoth Lakes. Benton is a destination for 10-12% of employees, followed by Other and Independence. (Eastern Sierra Housing Needs Assessment, Tri-Valley Profile)

The median household income in the Tri-Valley in 1999 was $40,278, but varied by the age of the householder:

25-34 years old	$26,667 median household income
35-44 years old	$53,750
45-54 years old	$49,107
55-64 years old	$50,139
65-74 years old	$29,239
75 years or older	$30,000

(Mono County Housing Element, Table 30);

Tri-Valley's median household income was in the middle range for all communities in the unincorporated area. Antelope Valley and Bridgeport had lower median incomes while Mono Basin, June Lake, and Long Valley/Wheeler Crest had higher median incomes.

The 2000 U.S. Census indicated that in 1999 households in the Tri-Valley had income from a variety of sources:

Wage Income	273 households (73% of all households)
Self-Employment Income	54 households (14% of all households)
Interest/Dividend Income	129 households (34% of all households)
Social Security Income	131 (35% of all households)
Supplemental Security Income	28 (7% of all households)
Public Assistance Income	6 (2% of all households)
Retirement Income	111 (30% of all households)

(Mono County Housing Element, Table 31).

The Tri-Valley area had the highest number and percentage of households with retirement income and along with the Antelope Valley the highest number and percentage of households with Social Security income and Supplemental Security income. The Eastern Sierra Housing Needs Assessment corroborated this data, noting that "the percentage of retired households [in the Tri-Valley area] is more than double Mono County, at 5% vs. 2%" (Eastern Sierra Housing Needs Assessment, Tri-Valley Profile).

The Eastern Sierra Housing Needs Assessment Tri-Valley Profile also notes that:

> Self-employment is higher here (13%) than Mono County (10%). There is also a possible corollary to telecommuting, as 27% of employee households have an average of 1.56 telecommuters. This is higher than Mono County; however, they average fewer telecommuting days (2.59 versus 3.34 for the county

POPULATION GROWTH IMPACTS

POPULATION IMPACTS. The estimated population growth resulting from the project is 120 persons (47 single-family residential units x 2.54 average household population in the Tri-Valley), a 26% increase over Chalfant's population of 465 persons in 2000 and a 13% increase over the Tri-Valley population of 954 persons in 2000. The growth in population will create impacts to schools, public services (fire, police, emergency medical services), and county services such as libraries, parks and recreational facilities, and administrative services. The extent of those impacts

is difficult to gauge since it is unknown how many residents will move from other areas of the county and how many will be newcomers.

If the new population follows the age trends found in the Tri-Valley in 2000, six people will be younger than 5, 24 will be 5-17 years old, 74 will be 18-64 years old, and 16 will be 65 years or older. The 30 pre-school and school-aged children will create impacts on schools and the transportation system, the 74 working-age people will create impacts primarily on the transportation system, and the 16 senior people will create potential impacts to social services and transportation. Impacts of this growth are discussed in applicable sections of the DEIR (e.g. circulation, public services, noise, etc.).

HOUSING IMPACTS. The housing to be built by Workforce Homebuilders LLC will be single-family factory-built housing units. Housing components will be constructed elsewhere, trucked to the site, and assembled on site. The housing is anticipated to sell in the $250,000 to $300,000 price range. The proposed houses would be affordable to households with above-moderate incomes and would fulfill the regional housing need for above-moderate income housing in the Tri-Valley.

The project site currently has an existing mobile home on it that would be removed. It is assumed that that mobile home is an affordable housing unit and that removing it to allow for the development on site would represent the removal of an affordable housing unit. Mono County General Plan Housing Element policies require development projects to provide affordable housing; i.e.,

Policy 5 Require new development projects to provide their fair share of affordable housing units – an amount sufficient to accommodate the affordable housing demand created by the development project. Refine and continue use of inclusionary housing requirements to reflect a fair share contribution of units, in-lieu fees, land, etc. Coordinate regional housing mitigation and fee impact programs with those of the Town of Mammoth Lakes.

Program 9 Require development projects to construct affordable housing. The continued affordability of these units shall be assured through enforceable documents/deed restrictions that flow with the sale or ownership transference of the property. Until the results of the County Fee Impact Study are adopted, unit ratio minimum requirements are as follows: one unit for 10-50 units; one unit per each 50 units thereafter. Affordable (very low and low income) housing units provided for projects will not be considered in determining the maximum density permitted for development projects. Smaller projects shall contribute their fair share via in-lieu housing mitigation fees or other comparable mechanisms.

When the results of the County Fee Impact Study are adopted, this program shall be amended to reflect the results of that study.

Responsible Agencies: Community Development Department, Planning Commission, Board of Supervisors.
Timeframe: Ongoing, 2001-2008.
Funding: Development Fees.

Mono County General Plan policies also promote the preservation of existing housing stock. Specific Plan policies require Workforce Homebuilders LLC to provide two affordable housing units, which will be deed restricted so they remain affordable. One of the affordable housing

units will replace the existing mobile home on the site; one will fulfill General Plan policies requiring development projects to provide affordable housing units according to the ratios listed in the policy.

Housing demand in Mono County has increased since 2000. In the Tri-Valley area, particularly in Chalfant, it is unknown how much of that demand comes from residents of Mono County and how much of the demand comes from residents of Inyo County. By providing additional housing, the project will meet an identified housing need.

EMPLOYMENT IMPACTS. Chalfant is primarily a residential community with extremely limited commercial and agricultural facilities and no industrial or manufacturing sites. As data from the 2000 Census indicate, most workers in Chalfant commute to jobs outside Chalfant, primarily in Bishop and Mammoth Lakes.

The proposed development will create jobs during the initial construction phases of the development. However, since the housing is manufactured housing built elsewhere and assembled on site, the number of jobs will be fewer and will last for a shorter period of time than if the housing was conventional stick-built housing. It is anticipated that short-term construction-related jobs will be absorbed by existing employees from Mono County and Bishop and that the construction phases of the development will not increase the local population by increasing employment opportunities. Similarly, the development will not create additional demand for housing as a result of increasing employment opportunities since construction jobs will be taken by existing residents of the area.

Residential development may also create a limited amount of employment to provide support services for the development such as home repairs, landscape services, cleaning services, etc. These activities will create a need for supplies and jobs in these sectors. In addition, residents of the development will create a demand for goods and services such as household goods, clothing, recreation, transportation needs, utility needs, etc. The increased demand for those services will create additional job opportunities. It is likely that most of the demand for goods and services will be met by existing businesses and employees, primarily in Bishop, and that the project will not create the need for additional housing for employees.

The commercial development will create jobs, but the number and type of jobs are unknown at this time. Since the commercial uses will be small and focused on meeting local needs, they are not anticipated to create many jobs. It is anticipated that jobs created by the commercial unit will be taken by local residents of the area and that the commercial units will not increase the local population by increasing employment opportunities or create an additional demand for housing as a result of increasing employment opportunities.

CONCLUSION

The project will not result in significant impacts to population, housing, or employment; mitigation measures are not required.

PUBLIC SERVICES

WATER AND SEWER SETTING

Development in Chalfant is served by individual wells and septic systems.

WATER AND SEWER IMPACTS

The project is proposing a community water system for the project site (two to three wells, underground storage tanks, a booster/pump station, and an underground distribution system) and individual septic systems for the residences and the commercial development. The conceptual design of the water system is shown on Figure 7, Master Utility Plan--Water and Sewage System in Appendix A. Policies and Design Standards in the Mountain Vistas Specific Plan require 1) all infrastructure to be installed in each phase of the project, prior to the construction of any residential or commercial uses, 2) a method to ensure that on-site infrastructure will be maintained over the life of the project, and 3) visually offensive land uses, such as the water system components, to be screened.

The installation of two to three additional wells and 48 individual septic systems (47 residences and the commercial unit) could potentially result in impacts to water quantity and water quality in the area. Mountain Vistas Specific Plan policies require the applicant to obtain well and septic system permits from Mono County Environmental Health. Health Department requirements address the placement of wells and septic systems in order to avoid impacts to water quality.

The Water Well Feasibility and Siting Study concludes that "there will be no significant water level drawdown impacts on those off-site wells" and that there is sufficient water in the aquifer underlying the project site to meet the estimated demand for the project without significant impacts to the aquifer. Specific Plan policies also require the development of the new wells and the abandonment of the existing wells to occur as specified in the Water Well Feasibility and Siting Study for the project. This requirement is to ensure that there are no impacts to existing off-site wells.

There will be no impacts to water or sewer systems since there are currently none in Chalfant. Impacts of the proposed water and septic systems on water resources in the area (including existing wells) are discussed under Water Resources later in this chapter.

STORM DRAINAGE SETTING

There are no storm drainage systems in Chalfant. Flooding is discussed in the Hazards section of this chapter.

STORM DRAINAGE IMPACTS

Proposed storm drainage improvements for the project are shown on Figure 6, Master Preliminary Grading and Drainage Plan (see Appendix A, Map Set). The improvements proposed by the applicant include drainage swales along all on-site roads, culverts, drainage easements, and a stormwater retention area. Drainage would be directed off site to the existing roadside ditch along the north side of Chalfant Road. The natural drainage pattern on the project site is from the northwest to the southeast. The proposed drainage system would flow in the same direction.

Currently, Chalfant Road and Hwy. 6 act as barriers, containing runoff from the parcel. Although the project site is relatively flat and soils on site are porous sands and gravels, the project would increase runoff as a result of the development of impervious surfaces on site (roads, buildings). The project engineers have calculated the additional runoff that would occur as the result of a 25-year storm event. Without the proposed development, natural runoff onsite from a 25-year storm event would be 4.3 cubic feet per second (cfs); with the proposed development, runoff from a 25-year storm event would be 15.5 cfs. The proposed stormwater retention area, located in the central southern portion of the parcel (see Figure 6 in Appendix A), has been designed to retain

36,000 cubic feet (cf) of runoff, enough to reduce the postdeveloped flow to predevelopment levels. With the on-site retention area, the project will not create additional runoff impacts in the area and will not result in significant impacts to storm drainage in the area.

SOLID WASTE SETTING

Chalfant has a solid-waste landfill and transfer station located approximately ½-mile east of the community of Chalfant. The landfill accepts approximately 10% of the local waste stream; the remainder is diverted through the transfer station to Benton Crossing Landfill located near Mammoth Lakes. Benton Crossing Landfill has a site life/capacity of 20 years, through late 2023 [Report of Disposal Site Information for Benton Crossing Landfill (RDSI)]. There are no solid-waste collection services in Chalfant; residents are responsible for their own waste disposal.

SOLID WASTE IMPACTS

Benton Crossing Landfill has sufficient capacity to serve 47 additional single-family residences and a small-scale commercial use; the site life and loading rate calculations for the landfill were calculated using California Department of Finance growth projections for the unincorporated areas of Mono County (RDSI for Benton Crossing Landfill). Design Standards in the Mountain Vistas Specific Plan require any solid-waste dumpsters used by businesses to be visually screened. The project will not create significant impacts to solid-waste facilities or services.

ENERGY SERVICES SETTING

Most housing in Mono County uses a combination of energy sources, including electricity, propane and wood. The Eastern Sierra Housing Needs Assessment (Tri-Valley Profile) notes that most of the homes in the Tri-Valley are heated by propane or wood. Electricity in Chalfant is provided by Southern California Edison. Individual propane tanks provide additional power. Propane is supplied by local private firms. Wood and wood products (pellets and pressed logs) are also supplied by local private firms. New buildings in Mono County must comply with the California State Energy Efficiency Standards (Title 24 of the California Administrative Code). These energy efficiency standards regulate energy consumption for lighting, air heating and cooling, water heating, and ventilation.

ENERGY SERVICES IMPACTS

Electricity will be provided to the project by Southern California Edison. Propane will be provided to residents through an on-site community system (storage tanks and underground distribution lines). Propane will be the primary heating source for the project. Policies and Design Standards in the Mountain Vistas Specific Plan require all utility lines to be installed underground in compliance with Mono County General Plan policies and Land Development Regulations. Specific Plan policies also require any wood-burning appliances installed as secondary heating sources to be Phase II EPA certified in compliance with Mono County General Plan policies.

Energy consumption figures for Chalfant are not available. Energy consumption data for Bishop residential uses were used to calculate long-term energy consumption for the residential portion of the project since the climate in Bishop is similar to the climate in Chalfant.

The proposed single-family residential units are estimated to utilize the following amounts of energy annually at buildout (note: these are "worst-case" estimates for each energy source, see assumptions in the footnotes):

Electricity	16,000 kilowatt hours (kWh) per dwelling unit x 47 units = 752,000 kWh[1]
Propane	500-700 gallons[2] per dwelling unit x 47 units =23,500 – 32,900 gallons
Firewood	2 cords per dwelling unit x 47 units = 94 cords[3]

Local purveyors of these resources have indicated that sufficient resources are available to serve the project (Southern California Edison, Eastern Sierra Propane, local wood purveyors in Bishop).

Additional small amounts of propane and electricity would be required for the commercial uses. These figures are not considered significant since the energy is available and the project is a small-scale energy-consuming project.

POLICE SERVICES SETTING

Law enforcement services in Chalfant are provided by the Mono County Sheriff. Two Resident Deputies are allocated to the Tri-Valley area. Each normally works five days per week, eight hours per day. Normal coverage is provided from 8 a.m. until midnight. For after hour emergencies, deputies are called out from their homes. The Mono County Sheriff is currently recruiting deputies to fill vacancies in the department, including one in the Tri-Valley area. The nearest Sheriff's substation is in Crowley Lake.

The Mono County Sheriff does not currently have any identified needs for additional personnel, equipment or facilities in the Chalfant area.

POLICE SERVICES IMPACTS

The Mono County Sheriff's Department has indicated that although they do not foresee a need to add additional personnel to the department as the result of the proposed project, the project will create impacts to the department in the form of increased calls for service (during normal hours and after hours) and increased mileage on patrol vehicles which would necessitate earlier replacement of those patrol vehicles (Cole Hampton, Assistant Sheriff). Increased vehicle mileage and increased after-hours call-outs will increase costs for the Sheriff's Department.

Specific Plan policies require the development to contribute its share of the cost of additional law enforcement services in Chalfant. With the implementation of those fees, the project will not create significant impacts to law enforcement services.

FIRE/EMERGENCY MEDICAL SERVICES SETTING

The Chalfant Valley Fire Protection District (CVFPD) provides fire protection services to developed areas in Chalfant. The project site is within the sphere of influence boundaries of the CVFPD indicating that it is an area that should be served by the district. The FPD is an all-volunteer force with limited equipment, most of which is housed in the fire station located on Valley Road in Chalfant. The district currently has three engines and various tankers with hoses that can also be used to fight fires.

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[1] kWh use figures from June Lake Highlands EIR. Winter use might be higher in June Lake but summer use would probably be higher in Chalfant. Use figures were not available for Chalfant.

[2] This assumes that all appliances (washer, dryer, etc.) are gas. Cameron Riley, Eastern Sierra Propane, pers. Comm.

[3] Jan Larsen, Senior Planner, Inyo County Planning Department, pers. comm.

The FPD also provides Basic Life Support (BLS) emergency medical services for the area. Advanced Life Support (ALS) services are provided by paramedics from Bishop; the usual response time from Bishop is 20 minutes.

The Assistant Fire Chief/Acting Fire Chief (Steve Reish, pers. comm.) has indicated that the district has the following concerns about the project and about future development in Chalfant in general:

- The FPD does not have sufficient equipment or personnel to serve additional development.
- The FPD does not have a large enough station to store all its equipment inside now. If it acquires more equipment it will need additional storage facilities.
- The FPD does not have qualified personnel to comment on required fire flows; it relies on the State standards for minimum fire flow requirements and the placement of hydrants. The district is concerned that large-scale projects be made to adhere to these minimum standards.
- The FPD recently raised its fire mitigation impact fee but is concerned that it is still too low to adequately address the impacts of new development.
- The FPD is currently in the process of trying to plan for new development in Chalfant and to assess what it needs in terms of equipment, facilities, and personnel to serve the projected development for Chalfant.
- The district is concerned that there is only one access road into the development in West Chalfant.
- There is a perception that truck traffic on Hwy. 6 has increased in recent years, particularly after the Walker flood in 1997, and that accidents have increased as a result.
- Chalfant has experienced a number of car crash fatalities in the past year, some of them due to collisions with large trucks. There is a strong concern that traffic through Chalfant, and along Hwy. 6 throughout the Tri-Valley, needs to be slowed down to increase safety, particularly in community areas or anywhere residents may be entering or exiting the highway. There is a perception that turn lanes are needed along Hwy. 6 at certain access points to ensure safe access for local residents.
- The Tri-Valley area would like to have a paramedic station somewhere in the Tri-Valley.

FIRE/EMERGENCY MEDICAL SERVICES IMPACTS

The project will result in 47 single-family residences and a small-scale commercial unit. The population is estimated to increase by approximately 120 persons, a 25% increase over Chalfant's population of 465 persons in 2000 and a 13% increase over the Tri-Valley population of 954 persons in 2000. Traffic is also anticipated to increase.

The project will create impacts to fire and emergency medical services in the Chalfant area. Those impacts could be significant since the population could increase by 25%. Fire mitigation fees will be collected at the time of development to offset the cost of providing service to the development but the FPD has indicated that those fees may not sufficiently mitigate the impact to the district.

In order to mitigate potentially significant impacts to fire and emergency medical services in Chalfant, proposed mitigation measures require the development to contribute its fair share of the cost of additional fire equipment and facilities to serve Chalfant. Specific Plan policies and

plans also require the installation of fire hydrants and sufficient water storage to meet the required fire flows. Prior to approval of the final tract map, the project proponent must provide the County with a "will serve" letter from the Chalfant Valley FPD, indicating its capability to serve the proposed development and its approval of fire protection and suppression components of the proposed project design. Fire mitigation fees will be collected at the time of development to offset the cost of providing service to the development but it is unclear whether these fees will sufficiently mitigate the impact to the district. With the proposed mitigation, the project will not create significant impacts to fire and emergency medical services in Chalfant.

SCHOOLS SETTING

Chalfant is within the boundaries of the Eastern Sierra Unified School District (ESUSD). There are no schools in Chalfant. The ESUSD has an elementary school and a small alternative high school in Benton. Edna Beaman Elementary serves grades K-8 and has approximately 65 students. High Sierra Academy serves grades 9-12 and has approximately three students. Some elementary students in the Tri-Valley utilize Edna Beaman Elementary. Others, particularly those in Chalfant, apply for an interdistrict transfer to attend school in Bishop. The Bishop Union Elementary School District had 22 students from Chalfant during the 2003-2004 school year. Students from Chalfant attending elementary school in Bishop must provide their own transportation. Most high school students in the Tri-Valley attend high school in Bishop at Bishop Unified High School. Approximately 10-12 students from Chalfant attended high school in Bishop during the 2003-04 school year. The ESUSD provides a bus to transport students from Benton, Hammil and Chalfant to Bishop.

SCHOOLS IMPACTS

The estimated population growth from the project is 120 persons. If the new population follows the trends found in the Tri-Valley in the 2000 Census, 6 people will be younger than 5, 24 will be 5-17 years old, 74 will be 18-64 years old, and 16 will be 65 years or older. The 30 pre-school and school aged children will create impacts on the school systems. It is hard to know how many of these students would be elementary students and how many would be high school students.

Joen Painter, the Superintendent of the Bishop Union Elementary School District, has indicated that the district currently has no empty classrooms. For every additional 20 children aged 4-8 the district would need one more teacher and an additional classroom. Beyond that they would need another teacher at other grade levels. Mark Geyer, the superintendent of the Bishop Joint Unified High School District, has indicated that the district is projecting a slight but steady decline in enrollment over the next five to 10 years. The district has sufficient facilities and staffing to meet the projected growth in school-aged children in Chalfant. Both superintendents indicated the need for additional funding to meet the needs of additional students from Chalfant.

School mitigation fees will be collected at the time of development to offset the cost of providing service to the development.

With the proposed mitigation, the project is not anticipated to create significant impacts to school districts that provide services to Chalfant.

RECREATIONAL SETTING

Chalfant has a community center and park owned and operated by Mono County. The park has play equipment and a grass area that is used as an informal ballfield. There are no other

developed recreational facilities in the area. The nearest developed recreational facilities are in Bishop, approximately 13 miles south of Chalfant. Undeveloped recreational activities occur on the public lands throughout the Tri-Valley.

The project includes an approximately one-acre site that will be used for stormwater retention and as a small park. The project proponents have indicated that they intend to install picnic tables, grills, and perhaps some playground equipment at the park site.

The County has identified a need to update the playground equipment at the Chalfant park at an estimated cost of $70,000 (Mono County Capital Improvement Program).

Mono County General Plan policies require the development of park facilities to accommodate local population growth in compliance with the following park standards (Conservation/Open Space Element, Outdoor Recreation policies):

Policy 2: Plan, design, and construct parks and recreation facilities to coincide with projected growth.

Action 2.1: Provide new park facilities to accommodate growing populations in accordance with the following parkland standards:

a. Neighborhood parks: a minimum of one acre per 1000 population.
   Neighborhood parks should be centrally located to serve areas within a one-half mile radius and should be easily accessible by foot, bicycle, or automobile. Typical facilities include children's play areas, picnic facilities, sitting areas, open turf, and if space permits, paved areas for games such as basketball or tennis.
b. Community parks: a minimum of three acres per 1000 population.
   Community parks should be centrally located to serve areas within a two mile radius and should be easily accessible by foot, bicycle, or automobile. Typical facilities include softball fields, large turf areas for soccer or football, on-site restrooms, paved areas for basketball, and walking paths/fitness trails, and if space permits, children's play areas and picnic facilities.
c. Regional parks: a minimum of 10 acres per 1000 population.
   Regional parks should be located to serve areas within a 10-15 mile radius and should be easily accessible by automobile. Typical facilities include ballfields, on-site restrooms, picnic facilities, and specialized facilities such as motocross tracks, pools, shooting ranges.

RECREATIONAL IMPACTS

At buildout, the project would increase the population in Chalfant by 120 persons, 30 of them younger than 18. This is a 25% increase over the existing population in Chalfant. This would create a potentially significant impact to the park facilities in Chalfant, particularly to the playground equipment.

The inclusion of a park area within the subdivision, with picnic facilities and playground equipment, will mitigate impacts to a less-than-significant level.

CONCLUSION

The project will result in potentially significant impacts to schools, police services, and fire and emergency medical services; with mitigation those impacts will be reduced to less-than-significant levels. The proposed mitigation measures have been incorporated into the Specific Plan as standards and policies. The project will not result in significant impacts to other public services; no mitigation measures are proposed for other public services.

PUBLIC SERVICES MITIGATION

The following proposed mitigation measures mitigate the environmental impact(s) identified in the previous section:

PS-1 Prior to the approval of the Final Tract Map, the County and the developer shall finalize financial requirements for the project's contribution to the provision of additional emergency medical services in Chalfant (Mountain Vistas Specific Plan Program 16-A).

PS-2 Prior to the approval of the Final Tract Map, the County and the developer shall finalize financial requirements for the project's contribution to the provision of additional law enforcement services in Chalfant (Mountain Vistas Specific Plan Program 15-A).

PS-3 Prior to the approval of the Final Tract Map, the County and the developer shall finalize a development plan for the on-site park, including the type and location of all facilities to be located at the park, including picnic facilities and playground equipment (Mountain Vistas Specific Plan Program 18-A).

PS-4 At the time of building permit approval, collect fire mitigation fees (Mountain Vistas Specific Plan Program 13-A).

PS-5 At the time of building permit approval, collect school mitigation fees (Mountain Vistas Specific Plan Program 17-A).

PUBLIC SERVICES MITIGATION MONITORING

See mitigation monitoring plan in the final EIR.

GEOLOGY AND SOILS

GEOLOGY/SOILS SETTING

Soils throughout the Tri-Valley are Quaternary Alluvium (MEA Figure 15L/M), a deep and highly porous soil. The **Water Well Feasibility and Siting Study** for the project site identifies the following local geologic conditions:

- **Valley Fill Deposits** -- are exposed at ground surface in the Mountain Vistas Specific Plan area. These are relatively unconsolidated sand, silt, and gravel eroded from the surrounding hills and deposited on the valley floor. The expected thickness of these deposits is not more than 20-30 feet.
- **Alluvial Fan Deposits** -- also consist of silt, sand, and gravel eroded from the White Mountains and deposited on the valley below. The thickness of this deposit at the project site is at least 100 feet and likely to be 300 feet or greater.
- **Bishop Tuff** -- is volcanic in origin and consists of a rhyolitic ash flow, partially welded tuff, nonwelded tuff, and tuff. In the project area, it contains widely spaced jointing and is considered somewhat friable. It is possibly interstratified with the lower portions of the underlying old alluvium described below.
- **Older Alluvium** -- is also comprised of silt, sand and gravel eroded from the surrounding hills. It may underlie the alluvial fan deposits discussed above or the Bishop Tuff. It may also be interstratified with the lower portions of the Bishop Tuff. The maximum thickness of this alluvium is unknown but may possibly be perhaps 500 feet or greater.

WIND CONDITIONS SETTING

The MEA identifies the Chalfant area as subject to wind erosion (MEA Figure 18F). The prevailing wind direction in the area is from the north ten months of the year and from the south in November and December, based on data collected at the Bishop airport climatological station, the nearest station to Chalfant (see www.ncdc.noaa.gov). That station has been in operation since 1930. Average annual wind data for the Bishop Airport are shown in Table 2; mean wind speed and peak gust speed are in miles per hour (mph).

Table 2: Climatic Wind Data, Bishop Airport

Month	Prevailing Wind Direction	Mean Wind Speed	Peak Gust
January	North	8 mph	60 mph
May	North	8 mph	63 mph
March	North	10 mph	58 mph
May	North	11 mph	62 mph
May	North	9 mph	62 mph
June	North	9 mph	54 mph
July	North	8 mph	60 mph
August	North	8 mph	70 mph
September	North	8 mph	47 mph
October	North	9 mph	52 mph
November	South	8 mph	66 mph
December	South	7 mph	68 mph
Annually	North	9 mph	70 mph

The weather station at Bishop is located at the airport, 2 ½ miles east of town, on the floor of the Owens Valley which is oriented northwest to southeast and at Bishop is 12 miles wide, level, and semi-arid. The valley is enclosed by the 12,000- to 14,000-foot peaks of the Sierra Nevada to the west and the 12,000- to 14,000-foot peaks of the White Mountains to the east. The northern end of the valley is partially cut off by 6,000- to 8,000-foot mountains located north of Benton. During the summer and autumn, northerly winds occur in the early morning and late evening. In the heat of the afternoon, the wind is southerly and occasionally strong.

GEOLOGY/SOILS AND WIND IMPACTS

Soils in the Chalfant area are primarily alluvial soils, sand and silt, overlying a layer of volcanic rock (Bishop Tuff). These soils tend to be highly erodible and subject to wind erosion. The Chalfant area has been identified as an area subject to wind erosion (MEA Figure 18F). The prevailing wind direction in the area is from the north 10 months of the year and from the south in November and December. Average annual wind speeds are 9 mph with annual peak gusts of 70 mph (see Table 2).

The Mono County Regional Transportation Plan (RTP) identifies safety along Hwy. 6 during hazardous conditions (primarily dust storms) as a concern in the Tri-Valley and contains a policy to minimize the dust hazards on Hwy. 6 (Mono County RTP, Tri-Valley policies, Action 1.1).

Site disturbance caused by infrastructure development, road construction, and building construction would contribute to the potential for soil erosion in the area, particularly during periods of heavy wind. Dust resulting from site disturbance and soil erosion could affect traffic

safety on Hwy. 6 as well as residential areas located across Hwy. 6. The potential for soil erosion will continue over the life of the project if disturbed areas are not addressed. In addition, dust from surrounding undeveloped, sparsely vegetated areas could affect the proposed housing. The potential for dust and wind erosion is a potentially significant long-term effect of the project that can be reduced to less-than-significant levels with mitigation.

SEISMIC SETTING

Earthquakes occur frequently in the Eastern Sierra and in Mono County. Review of the USGS website shows that earthquakes occur in Mono County, particularly in the Long Valley Caldera, weekly and almost daily. The majority of those earthquakes are under Magnitude 3 and are not felt by people. Associated seismic and geologic hazards such as landslides, rockfalls, and ground failure have occurred in conjunction with earthquakes. The Mono County MEA (Chapter 19, Natural Hazards) provides the following information concerning seismic hazards in Mono County:

> Mono County covers an area that is relatively young by geologic standards. It is located at a stress point where the earth's crustal plates are exerting opposite pressures against each other. This combination creates both "tectonic" earthquakes (e.g. land mass movement) and volcanic activity that can trigger earth shaking (e.g. magma chamber movement and lava dyke formations). Up-to-date information concerning earthquake activity in the county is available on the U.S. Geological Survey website, www.usgs.gov.
>
> The primary seismic hazard in the county is strong to severe groundshaking generated by movement along active faults. The entire county, except for a small portion of the Sierra crest, is in an area where intense groundshaking is possible. This area has been designated as a Seismic Zone 4, the zone of greatest hazard defined in the Uniform Building Code.
>
> In addition to tectonic movement, the Long Valley-Mammoth Lakes region has experienced numerous earthquakes caused by the movement of magma below the earth's surface. The oval shaped Long Valley Caldera spans an area approximately ten by twenty miles, and is among the largest volcanoes in the continental United States. For additional current information on the Long Valley caldera, see the U.S. Geological Survey website, www.usgs.gov.
>
> Ground failure induced by groundshaking includes liquefaction, lateral spreading, lurching, and differential settlement, all of which usually occur in soft, fine-grained, water-saturated sediments, typically found in valleys. During the 1980 Mammoth Lakes earthquake sequence, ground failure was prevalent at Little Antelope Valley, along margins of the Owens River in upper Long Valley, along the northwest margins of Lake Crowley, and along Hot Creek Meadow.
>
> All of Mono County is situated within Seismic Zone 4, and consequently new construction in the county must comply with stringent engineering and construction requirements. In addition, existing buildings that may be subject to seismic hazards must comply with new requirements of the unreinforced masonry building law (Government Code Section 8875).
>
> Subsidence is caused by tectonic movement of the earth; by withdrawal of fluids such as water or oil; by compaction which occurs when copious amounts of water are applied to an arid area; or by severe loading, such as when large bodies of water are impounded. The most dramatic tectonic subsidence occurs during earthquakes, when areas can drop suddenly. During the May 1980 sequence of earthquakes near Mammoth Lakes, there were several locations near the Hilton Creek Fault where the ground surface dropped about four inches on the northeast side of fractures. Along the "Mammoth Airport fault zone", up to 12 inches of vertical offset on the east side of ruptures was observed (Taylor

and Bryant, 1980). Another tectonic change in ground elevation which occurs in Mono County is associated with the movement of magma beneath Long Valley Caldera.

Figure 34 F in the MEA identifies Seismic Hazards in the Tri-Valley area. The project site is not located in or adjacent to an Alquist-Priolo Fault Zone nor is it located in the vicinity of quaternary faults identified in the Tri-Valley. The majority of identified faults in the Tri-Valley are located to the north and west of Chalfant and to the east along the base of the White Mountains.
While the project site is not on or adjacent to a fault it is located in an area known as the Eastern California Shear Zone. Several major fault systems in California accommodate high slip rates and significantly contribute to the earthquake hazard in California including the Eastern California Shear Zone, a fault system that extends along the Eastern Sierra from Mono County south through Inyo County.

The Chalfant area has experienced strong earthquake activity in the past. Dave Hill, Scientist-in-Charge of the U.S. Geological Survey's Long Valley Observatory, provided the following information concerning the most recent major earthquake in the Chalfant area:

> The Chalfant Valley earthquake (M=6.4[4]) occurred on July 21, 1986. It was preceded by a month-long foreshock sequence that began with a M=2.6 earthquake on July 3 and built up to a M~5.8 (as I recall) earthquake just 24 hours before the main shock. The area had shown virtually no previous earthquake activity (since the mid-1970s anyway). The aftershock sequence was also rather energetic including three M>5.5 earthquake (the largest was close to M~6). I think the associated damage was minimal aside from rock falls in the mountains and a number of mobile homes in the Chalfant area that were toppled from their (unstable) foundations.

SEISMIC IMPACTS

Probabilistic Seismic Hazard Assessment (PSHA) maps prepared by the California Geological Survey (CGS) and the U.S. Geological Survey (USGS) show the earthquake shaking hazard for areas throughout Mono County. Earthquake shaking hazard is what causes most damage to people and property during an earthquake. The valley floor in the Tri-Valley, where Chalfant is located, is in the middle in terms of earthquake shaking hazards.

Maps prepared by the California Geological Survey (CGS) and the USGS also show the magnitude of the earthquake that causes the dominant hazard for peak ground acceleration at 10% probability of exceedance in 50 years with alluvial site conditions. In the Tri-Valley it would be a magnitude 7.0-7.5 earthquake.

Maps prepared by the DMG and the USGS also show the distance of the earthquake that causes the dominant hazard for peak ground acceleration at 10% probability of exceedance in 50 years with alluvial site conditions. In much of Mono County, the distance to the nearest fault is very small.

The Mono County Emergency Operations Plan (EOP) notes that:

> Earthquakes occur all the time in Mono County, most of them of very small magnitude and not felt by people. Most people do not feel tremors under magnitude 3. Major damage to well-built structures does not occur until the earthquake is stronger than magnitude 5. Each unit of magnitude represents an earthquake wave amplitude 10 times greater than the next lower number. Each unit of magnitude

[4] M = Magnitude.

> corresponds to almost 30 times more energy than the previous magnitude. Seismologists do not know when a large earthquake will hit the Eastern Sierra again but do know that one will occur.

Moderate to severe groundshaking could affect structures on the site; in Mono County, all structures must comply with the requirements of the Uniform Building Code for Seismic Zone 4 in order to mitigate the potential effects of seismic hazards. Moderate to severe groundshaking can also result in seismically induced settlement, particularly on alluvial soils such as those on the project site. In compliance with the requirements of the Mono County Subdivision Ordinance, the applicant must submit a soils report prior to recording the final map for this project. Depending on the results of that report, subsequent structural specifications will address potential settlement issues. Potential significant impacts from seismic hazards can be reduced to a less-than-significant level through the application of standard mitigation measures.

VOLCANIC SETTING

The Long Valley Caldera was created approximately 760,000 years ago when a large amount of magma erupted explosively, collapsing the ground to form the 10 by 20-mile oval depression known as the Long Valley Caldera. Clusters of smaller volcanic eruptions have occurred in the caldera at roughly 200,000-year intervals. About 100,000 years ago, the most recent of these eruptions formed the Mammoth Knolls, low hills just north of the Town of Mammoth Lakes.

Volcanoes in the Mono-Inyo chain of craters have erupted more recently. Mammoth Mountain was formed by numerous eruptions 220,000 to 50,000 years ago. Mono and Inyo Craters were created between 400,000 and 5000 years ago. Panum Crater and Inyo Craters last erupted 500 to 600 years ago. The most recent eruptions in the chain occurred at Paoha Island, on Mono Lake, about 250 years ago.

A period of ongoing geologic unrest in the Long Valley area began in 1978 with a magnitude 5.4 earthquake centered 6 miles southeast of the caldera. Since then earthquake activity has increased. The most intense swarms occurred in May 1980 and included four strong magnitude 6 earthquakes. Between 1979 and 1980, the center of the caldera rose almost a foot, after decades of stability. The swelling continues, and by early 2000 totaled nearly 2.5 feet, indicating there is new magma rising beneath the caldera.

During the early 1990s, trees began dying at several places on Mammoth Mountain at the southwest edge of Long Valley caldera. Studies showed that the trees were being killed by large volumes of carbon dioxide gas (CO_2) seeping up through the soil from the magma below. Such emissions of volcanic gas, as well as earthquake swarms and ground swelling, commonly precede volcanic eruptions (USGS Fact Sheet 108-96).

VOLCANIC IMPACTS

The draft Multi-Jurisdictional Local Hazard Mitigation Plan for Mono County and Mammoth Lakes notes the following concerning the future potential for volcanic activity in Mono County:

> Volcanoes have been active in the area for millions of years and future eruptions are certain to occur. The pattern of volcanic activity over the past 5,000 years suggests that the next eruption in the Long Valley area will probably occur along the Mono-Inyo volcanic chain; the probability of such an eruption occurring in any given year is less than 1% (USGS Fact Sheet 073-97). Based on eruption frequency along the Mono-Inyo volcanic chain over the past 5,000 years, the probability of another eruption is roughly 1 in 200 (~0.5%) per year. Continued unrest of the sort that has occurred since 1980 results in a slightly elevated probability (but still generally less than 1% per year).

> As long as increased volcanic unrest continues in the Long Valley area (earthquake swarms, ground deformation, CO_2 gas emissions), the chances of an eruption occurring in the future will remain somewhat increased (USGS Fact Sheet 073-97). Evidence from large volcanic systems worldwide shows that unrest can continue for decades or centuries without leading to an eruption but may also result in eruptions after short periods of unrest (USGS Fact Sheet 073-97). To provide timely warning prior to an eruption, scientists from the USGS Volcanic Hazards Program continue to monitor geologic unrest in the Long Valley Area.

Due to the uncertainty concerning future volcanic eruptions, potential impacts from volcano hazards are not considered a significant effect and no mitigation is proposed.

LANDSLIDE SETTING

The Mono County MEA (Chapter 19, Natural Hazards) provides the following information on landslides in Mono County:

> Rockfalls and landslides are particularly common along the very steep slopes of the eastern scarp of the Sierra Nevada, where talus slopes provide evidence of abundant past rockfalls. During the winter and spring months, rockfalls can be lubricated with snow and ice and can become extremely fast moving and destructive. The May 1980 earthquakes triggered numerous rockfalls, especially at Convict Lake and in McGee Canyon (Bryant, 1980) and "spectacular rockfalls" were observed in Chidago Canyon and the White Mountains during the July 21, 1986, earthquake in Chalfant Valley (Smith, 1987). Landslides in areas of hilly and mountainous terrain can be triggered by groundshaking, heavy rains or human activities such as road cuts, grading, construction removal of vegetation, and changes in drainage.
>
> Mudflows involve very rapid downslope movement of saturated soil, sub-soil, and weathered bedrock. Large mudflows, such as the one that occurred in 1989 in the Tri-Valley area, can be destructive, particularly at the mouths of canyons. The movement of soil and debris by mudflow and other landslides over time is evident in the large alluvial fans at the edges of valley areas.

Areas at risk for rockfalls are shown in Figure 35 of the Mono County; there are no rockfall risk areas in the vicinity of Chalfant.

LANDSLIDE IMPACTS

There are no areas identified as subject to landslide or rockfall hazards within or adjacent to the project site. The project site is located in a flat area, several miles from the alluvial fan areas of the White Mountains. The project is not anticipated to create or be subject to landslide hazards; no mitigation is proposed.

MINERAL DEPOSITS SETTING

The MEA identifies the area as MRA 2, an area where:

> … adequate information indicates that significant mineral deposits are present or where it is judged that there is a high likelihood for their presence. This area shall be applied to known mineral deposits or where well developed lines of reasoning, based upon economic geologic principles and adequate data, demonstrate that the likelihood for occurrence of significant mineral deposits is high (MEA Figure 17 L/M).

MINERAL DEPOSITS IMPACTS

The MEA identifies the site as an area where there is a high likelihood that significant mineral deposits are present. The proposed development of the site, with residential and commercial

uses, would preclude development of any mineral resources in the short-term but would not result in significant irreversible long-term impacts to any mineral resources. No mitigation is proposed.

CONCLUSION

The project could result in potentially significant impacts to Geology and Soils; mitigation measures are required to reduce impacts to less-than-significant levels. The proposed mitigation measures have been incorporated into the Specific Plan as standards and policies.

GEOLOGY/SOILS MITIGATION

The following proposed mitigation measures mitigate the environmental impact(s) identified in the previous section:

GS-1 All development on site (structures, utilities) shall comply with the requirements of the Uniform Building Code for Seismic Zone 4 (Mountain Vistas Specific Plan Conservation Standard CS-28).

GS-2 A final Grading Plan, based on the preliminary grading and drainage plan in this document, must be approved by the Mono County Department of Public Works prior to the commencement of any development activities. The Grading Plan must include a comprehensive erosion and sediment transport control plan (Mountain Vistas Specific Plan Conservation Standard CS-13).

GS-3 The applicant shall be required to submit a soils report or process a soils waiver report. Any such report or waiver shall be reviewed and approved by the Director of Public Works, according to the provisions of Mono County Code Section 17.36.090 (Mountain Vistas Specific Plan Conservation Standard CS-29).

GS-4 Building envelopes and driveways shall be established on the final tract map for all lots in order to reduce site disturbance and associated dust, to avoid noise impacts to the residential units, and to minimize flood impacts (Mountain Vistas Specific Plan Conservation Standard CS-14).

GS-5 In order to minimize the potential for dust erosion, land disturbance (grading, cut and fill) for road construction, infrastructure installation, and building construction shall be limited to the areas identified on the final tract map for roads, utilities, building envelopes, and driveways (Mountain Vistas Specific Plan Conservation Standard CS-15).

GS-6 Dust generated during construction shall be controlled by the use of watering or other Best Management Practices (Mountain Vistas Specific Plan Conservation Standard CS-16).

GS-7 Speed limits on the construction site shall be reduced to minimize dust and windborne erosion (Mountain Vistas Specific Plan Conservation Standard CS-17).

GS-8 Construction materials (rock, debris, etc.) that are not utilized as road fill shall be removed to a designated landfill or approved site (Mountain Vistas Specific Plan Conservation Standard CS-18).

GS-9 The project proponent shall plant a windbreak along the north and south boundaries of the project site in order to reduce dust and windborne erosion over the life of the project. An easement for this windbreak shall be included on the final tract map for the project. The windbreak shall also be included on the final Landscape Plan for the project and its ongoing existence and maintenance shall be addressed in the CC&Rs for the project (Mountain Vistas Specific Plan Conservation Standard CS-19).

GS-10 The project proponent shall prepare a Stormwater Pollution Prevention Plan (SWPPP) and submit a Notice of Intent to comply with provisions of the State Water Resources Control Board's Stormwater NPDES Permit for Construction Activities. A letter of

clearance and/or waste discharge requirements from the Lahontan Regional Water Quality Control Board is required prior to grading/disturbance/construction of any kind (Mountain Vistas Specific Plan Conservation Standard CS-20).

GEOLOGY/SOILS MITIGATION MONITORING

See mitigation monitoring plan.

VEGETATION AND WILDLIFE

VEGETATION SETTING

Vegetation in the Chalfant area is primarily sagebrush scrub. The Mono County MEA provides two analyses of vegetation and landcover throughout the county. The California GAP Analysis Landcover system (MEA Figure 18) identifies vegetation in the Chalfant vicinity as Alkali Desert Scrub along the Hwy. 6 corridor, Cropland southeast of the community of Chalfant, and Freshwater Emergent Wetland at Fish Slough southwest of the project site. The USGS Landcover Analysis (MEA Figure 19) identifies vegetation in the Chalfant vicinity as Shrubland along the Hwy. 6 corridor, Pasture/Hay southeast of the community, Urban/Recreational along the Hwy. 6 corridor, and Grasslands/Herbaceous and Emergent Herbaceous Wetlands at Fish Slough.

Vegetation on the project site is sparsely scattered low-growing sagebrush scrub (see Figure 3). There are approximately six deciduous trees planted around the existing mobile home on site (see Figure 3). Three deciduous trees are also growing along the eastern property line, adjacent to the Hwy. 6 right-of-way (see Figure 3). The site was previously used for agriculture (alfalfa from 1948-1981 and potatoes from 1981-1982) but has not been in agricultural production since 1982.

SENSITIVE PLANT SPECIES

Fish Slough, approximately one mile southwest of the project site, provides habitat for several special status plant species including Fish Slough Milk Vetch, Inyo County Star Tulip, Alkali Ivesia, Silver Leaved Milk Vetch, and Hot Springs Fimbristylus (see Figure 4 and California Department of Fish and Game, California Natural Diversity Database, www.dfg.ca.gov). Fish Slough Milk Vetch is the only one state or federally listed as an Endangered or Threatened species. The remaining plant species are listed as "Special Plants" by the California Natural Diversity Database, a group that includes species identified by a variety of agencies and organizations as rare, sensitive, threatened, or declining.

The likelihood of any sensitive or special status plant species existing on site was considered to be slight due to the past agricultural use of the site, its location within the community of Chalfant and adjacent to Hwy. 6 and Chalfant Road, and the windblown nature of the area that makes the establishment of vegetation without irrigation difficult. In addition, a database search of the California Natural Diversity Database (CNDDB) revealed the only special status plant species in the area to be those occurring at Fish Slough, approximately one mile southwest of the project site. Due to the previously disturbed nature of the site and the results of the CNDDB search, no botanical survey was prepared for the site.

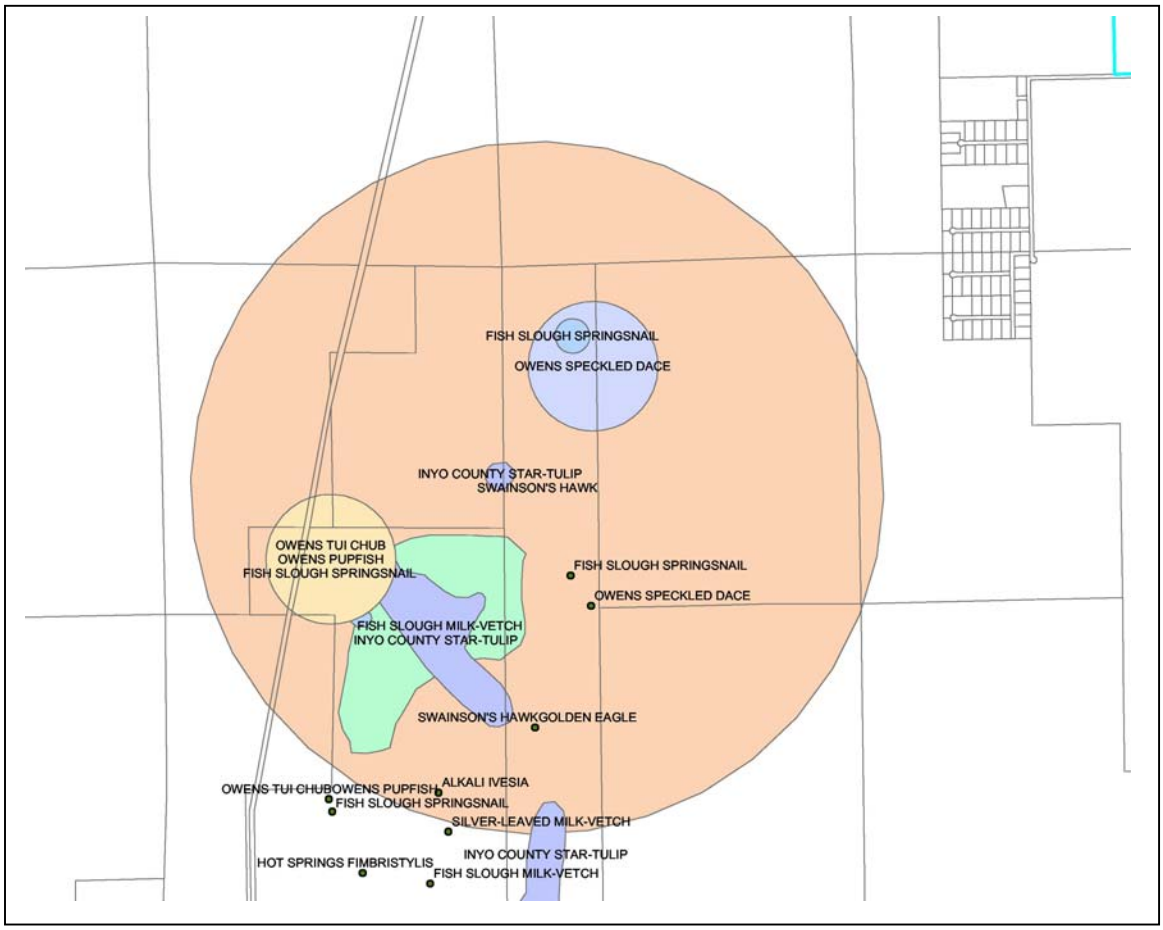
VEGETATION IMPACTS

Very low-growing and sparse sagebrush scrub occurs over the project site. This is a common and widespread vegetation community throughout the Eastern Sierra and is not considered a sensitive vegetation type. The project will remove six existing trees on site but will replace those trees with a windbreak of trees along the north and south boundaries of the project site,

landscaping trees along the Hwy. 6 frontage, and additional trees along roads within the project site.

There are no sensitive plant species on the project site. The nearest sensitive plant species are located over one mile away at Fish Slough. The project would have no direct impacts on those species. It could have an indirect impact by introducing more people to the area who could potentially visit Fish Slough and impact resources there. The potential for this type of indirect impact is less than significant, however, due to Fish Slough's management as an Area of Critical Environmental Concern (ACEC).

FIGURE 3:
EXISTING VEGETATION ON SITE



Source: California Department of Fish and Game, California Natural Diversity Database, www.dfg.ca.gov

Note: The project site is located at the upper right corner of the figure, to the right of the light blue line.

FIGURE 4:
SENSITIVE SPECIES, MOUNTAIN VISTAS SPECIFIC PLAN AREA

The Fish Slough ACEC is a system of springs and marshes cooperatively managed by the California Department of Fish and Game, the U.S. Bureau of Land Management, the Los Angeles Department of Water and Power, the University of California Natural Reserve System, the U.S. Fish and Wildlife Service, and the Eastern Sierra Audubon Society. Resources on site are fenced, established roads lead to viewing areas, and the area is patrolled to avoid human-related impacts to the resources. Recent habitat restoration activities at Fish Slough include fencing, vegetation removal, water control structure maintenance, and control of exotic fishes.

WILDLIFE SETTING

Wildlife use in the Chalfant area is limited. The Mono County MEA identifies the corridor along Hwy. 6 as a light use area for mule deer (MEA Figure 20). MEA Figure 32L/M notes that mule

deer use occurs primarily to the west and north of Chalfant, not in the center of the valley in the vicinity of the project site. No other large wildlife species are identified as using the area around the project site. Small mammals and birds typically associated with sagebrush scrub habitats, such as coyotes, rodents, lagomorphs, and various small birds, are expected to utilize the site to some degree.

Wildlife use of the site is likely to be slight, however, due to the past agricultural use of the site, the sparse vegetation on site which provides little or no cover, its location within the community of Chalfant and adjacent to Hwy. 6 and Chalfant Road, its proximity to existing development, noise, lights, and traffic, and the absence of water in the general vicinity. In addition, a database search of the California Natural Diversity Database (CNDDB) revealed the only special status wildlife species in the area to be those occurring at Fish Slough, approximately one mile southwest of the project site. Due to the previously disturbed nature of the site and the results of the CNDDB search, no wildlife survey was prepared for the site.

SENSITIVE WILDLIFE SPECIES

Fish Slough, approximately one mile southwest of the project site, is utilized by a variety of wildlife including ducks and geese and several special status species (MEA Figure 33L/M). The northern end of Fish Slough is identified as habitat for Swainson's Hawk, Golden Eagle, Fish Slough Springsnail, Owens Speckled Dace, Owens Tui Chub and Owens Pupfish (Figure 6 and California Department of Fish and Game, California Natural Diversity Database, www.dfg.ca.gov). Only the Swainson's Hawk, Owens Tui Chub and the Owens Pupfish are classified as state or federally listed Endangered or Threatened species. The remaining wildlife species are listed by the California Natural Diversity Database as "Species of Special Concern", a term that applies to wildlife not listed under the state or federal Endangered Species Acts but which are declining or are low in numbers.

WILDLIFE IMPACTS

The project site is adjacent to existing community areas and Hwy. 6 and has been used in the past for agriculture. Vegetation on site is sparse and low-growing and does not provide suitable cover for many species. There is no water source in the general vicinity. The site does not provide suitable habitat for wildlife species other than small birds and mammals commonly associated with sagebrush scrub. As mentioned previously, this is a common and widespread vegetation community throughout the Eastern Sierra. The conversion of 29 acres from sagebrush scrub to residential and commercial development will not create a significant impact on wildlife species.

Six special status species were identified as occurring in the vicinity of the project site. Of the six, four are limited to the Fish Slough area (Fish Slough Springsnail, Owens Speckled Dace, Owens Pupfish, and Owens Tui Chub). As mentioned previously, the project would have no direct impacts on these species but could have an indirect impact by introducing more people to the area who might potentially visit Fish Slough. The potential for this type of indirect impact is less than significant, however, due to Fish Slough's management as an Area of Critical Environmental Concern (ACEC).

Two of the special status species range over a much wider area. The Golden Eagle is a State Species of Special Concern/Fully Protected. It is an uncommon permanent resident and migrant throughout the state, except the center of the Central Valley. Its natural densities are very low, its reproductive rate is very low, and it is at the apex of a food chain. Habitat destruction (reclamation of grasslands for agriculture), shooting, and human disturbance of nest sites are major threats. Golden eagles typically nest on cliffs and in large trees in open areas. They use rolling foothills and mountain terrain, wide arid plateaus deeply cut by streams and canyons,

open mountain slopes, and cliffs and rock outcrops. Their territory size has been estimated to be 36 square miles in Southern California and 48 square miles in Northern California (www.dfg.ca.gov/whdab/html/B126.html).

The project site does not provide optimal habitat for golden eagles. Given the large size of their territory and the relatively small size of the project area, potential impacts to golden eagles would be less than significant.

Swainson's hawk is a state threatened species, whose status in 1999 was declining. Very limited breeding is reported in the Owens Valley. They typically nest in open riparian habitat, scattered trees or small groves in sparsely vegetated flatlands. Their diet is varied, including small mammals, amphibians, reptiles, birds, insects, and bats. Swainson's hawks require large, open grasslands with abundant prey in association with suitable nest sites. Their typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Suitable foraging areas include native grasslands or lightly grazed pastures, alfalfa and other hay crops, and certain grain and row crops. Their territory size has been estimated to average 1.6 square miles, although home ranges have been measured from 0.3 square miles to 2.1 square miles (www.dfg.ca.gov/whdab/html/B121.html). In the Tri-Valley, their foraging range may extend 5 miles from their nest site (Adrienne Disbrow, DFG Environmental Scientist, personal conversation with Haven Kiers, Mono County Planning Intern).

The project area provides good habitat for Swainson's hawk and several Swainson's hawk nest sites are known to occur along the Hwy. 6 corridor (scoping letter from Adrienne Disbrow, DFG Environmental Scientist). There is one nest located within ½-mile of the project site, within the 5-mile foraging range of the hawks, another located approximately 5 miles from the project site, and a third a little further than 5 miles from the project site (this and the following information on the Swainson's hawk is from Adrienne Disbrow, personal conversation with Haven Kiers, Mono County assistant planner). The nest located within ½-mile of the project site has been used five out of the last six years. Hawks in the third nest most likely would not be foraging within the project area.

The typical foraging habitat of Swainson's hawks is open grassland. In the Tri-Valley area, they prefer irrigated alfalfa fields, like those in the Hammil Valley, but they will forage over desert scrub as well, even though the desert scrub is not as productive as the alfalfa. The hawks typically eat small rodents but have been known to eat lizards occasionally.

The project will remove six existing trees on site but will replace those trees with windbreaks along the northern and southern boundaries of the project site, landscaping trees along the Hwy. 6 frontage and additional trees along the roads within the project site. Since the project site has been disturbed in the past, since it now contains a residence, and since it has only very sparse low-growing scrub vegetation on the majority of the site, it does not contain optimal foraging habitat for Swainson's hawks. Other areas of the Tri-Valley contain undisturbed open desert and agricultural fields that provide more suitable foraging habitat. The conversion of 29 acres of previously disturbed sagebrush scrub to residential and commercial development will create a less-than-significant impact on Swainson's hawks.

CONCLUSION

Project related impacts to vegetation and wildlife will be less than significant; mitigation measures are proposed to further reduce potential impacts. The proposed mitigation measures have been incorporated into the Specific Plan as standards and policies.

VEGETATION AND WILDLIFE MITIGATION

The following proposed mitigation measures mitigate the environmental impact(s) identified in the previous section:

VW-1 Domestic animals shall be restrained at all times, either through the use of leashes or animal enclosures. No animals shall be allowed to be free roaming. This requirement shall be reiterated in the project CC&Rs (Mountain Vistas Specific Plan Conservation Standard CS-21).

VW-2 Dogs on the project site during construction must be under the direct control of the owner at all times (Mountain Vistas Specific Plan Conservation Standard CS-22).

VW-3 Construction shall be limited to daylight hours in accordance with the Mono County Noise Regulations (Mono County Code Section 10.16) in order to minimize disturbances to wildlife (Mountain Vistas Specific Plan Conservation Standard CS-23).

VW-4 During construction, project boundaries shall be clearly delineated in order to avoid disturbances to surrounding off-site vegetation and soils (Mountain Vistas Specific Plan Conservation Standard CS-24).

VW-5 The project proponent shall revegetate disturbed areas resulting from roadway construction and infrastructure installation. Revegetation shall be conducted immediately following construction. Revegetated areas shall be irrigated as needed and maintained until the plants are established (Mountain Vistas Specific Plan Conservation Standard CS-25).

VW-6 To deter the spread of weeds, stockpiled topsoil shall be covered and disturbed areas shall be revegetated immediately following construction (Mountain Vistas Specific Plan Conservation Standard CS-26).

VEGETATION AND WILDLIFE MITIGATION MONITORING

See the mitigation monitoring plan.

VISUAL RESOURCES

VISUAL RESOURCE SETTING

Visually, the Tri-Valley is very open, with sweeping vistas of the surrounding mountains. Development and agricultural uses are highly visible since the floor of the valley is relatively flat and there is no screening vegetation (see Figure 5, Chalfant from the White Mountain Foothills). Chalfant appears as a relatively discrete area of development within a surrounding larger area of undeveloped sagebrush scrub and some agricultural lands. The community is predominantly one-story detached single-family residential development, with limited landscaping. Colors and materials of the structures tend to blend into the surrounding environment. Figures 6 and 7 show existing visual resources on the project site looking north and south on Hwy. 6.

The Bureau of Land Management (BLM) establishes Visual Resource Management (VRM) classes for the public lands it manages in the area (MEA Figure 12 L/M). BLM lands to the west of Hwy. 6 are identified as VRM III, Moderate, which means that "Visual contrast caused by a management activity can be evident, but must remain subordinate to the characteristic

landscape" (MEA, p. 114). BLM lands to the east of Hwy. 6, along the base of the White Mountains, are identified as VRM II, High, which means that "Visual contrast is permitted; management activity is seen, but it must not attract attention. Changes in any of the basic elements (form, line, color, texture) caused by the activity must not be visible in the characteristic landscape" (MEA, p. 114).

Hwy. 6 does not have a scenic highway designation. There are 60-110 kV transmission lines that run roughly parallel to Hwy. 6 on the west side of the highway, from Bishop to Chalfant. Overhead electrical distribution lines are evident in Chalfant. Large transmission lines (>110 kV lines) run along the west edge of the valley from Bishop to south of Hammil where they shift to the northwest. Outdoor lighting and streetlights are minimal in Chalfant.

VISUAL RESOURCE IMPACTS

Since the floor of the Tri-Valley is relatively flat and open, with little vegetation, any development will be highly visible. Design and conservation standards in the Specific Plan will mitigate visual resource impacts to the lowest feasible level by ensuring that the built components of the project blend into the surrounding environment as much as possible and that visually offensive uses such as propane tanks are visually screened through the use of landscaping, fencing, berms or other screening. Housing types, colors, and materials will be similar to existing development in Chalfant and will not create a significant visual impact.

Design standards for the project also limit streetlights in the project to major access points into the project and require all outside lighting to be shielded and directed so it does not go beyond the boundaries of the lot. Lighting will be similar to, and adjacent to, existing lighting in the community and will not create a significant visual impact.

Key viewsheds in the area include views from the north- and south-bound lanes of Hwy. 6, from the north and south entrances to the community and from further away on Hwy. 6, from the community on the eastern side of Hwy. 6 looking to the west, and from the community on the western side of Hwy. 6 looking east. Figures 6 and 7 show the existing project site from north and south on Hwy. 6 and visual simulations of the proposed development from the same locations. Figure 8 shows the southeast corner of the parcel, at the junction of Hwy. 6 and Chalfant Road, and a visual simulation of commercial development on that site. While the visual simulations show a noise attenuation wall along the eastern and northern property lines, the project has been redesigned so that a noise wall will be placed only along a portion of the northern property line. Landscaping will occur along the Hwy. 6 frontage.

The proposed development will visually link the existing developed areas east and west of Hwy. 6 in order to create a more visually cohesive community. It will also help develop an overall impression of a more dense community along Hwy. 6. From a distance, the development will appear an as extension of the existing development in Chalfant and will not create a significant impact to the existing long-range view of Chalfant and the surrounding area. Within the community of Chalfant and for travelers entering Chalfant from either direction on Hwy. 6, the development will significantly alter the visual impression in the area from mostly undeveloped desert scrub to a rural development. While the individual components of the development (e.g. building design and materials, lighting) will be similar to that existing in Chalfant, the overall change in the visual impression of the area will be significant.

CONCLUSION

Potentially significant unavoidable impacts will be present with regard to Visual Resources; mitigation measures are required to reduce impacts to the lowest feasible level. The proposed mitigation measures have been incorporated into the Specific Plan as standards and policies.

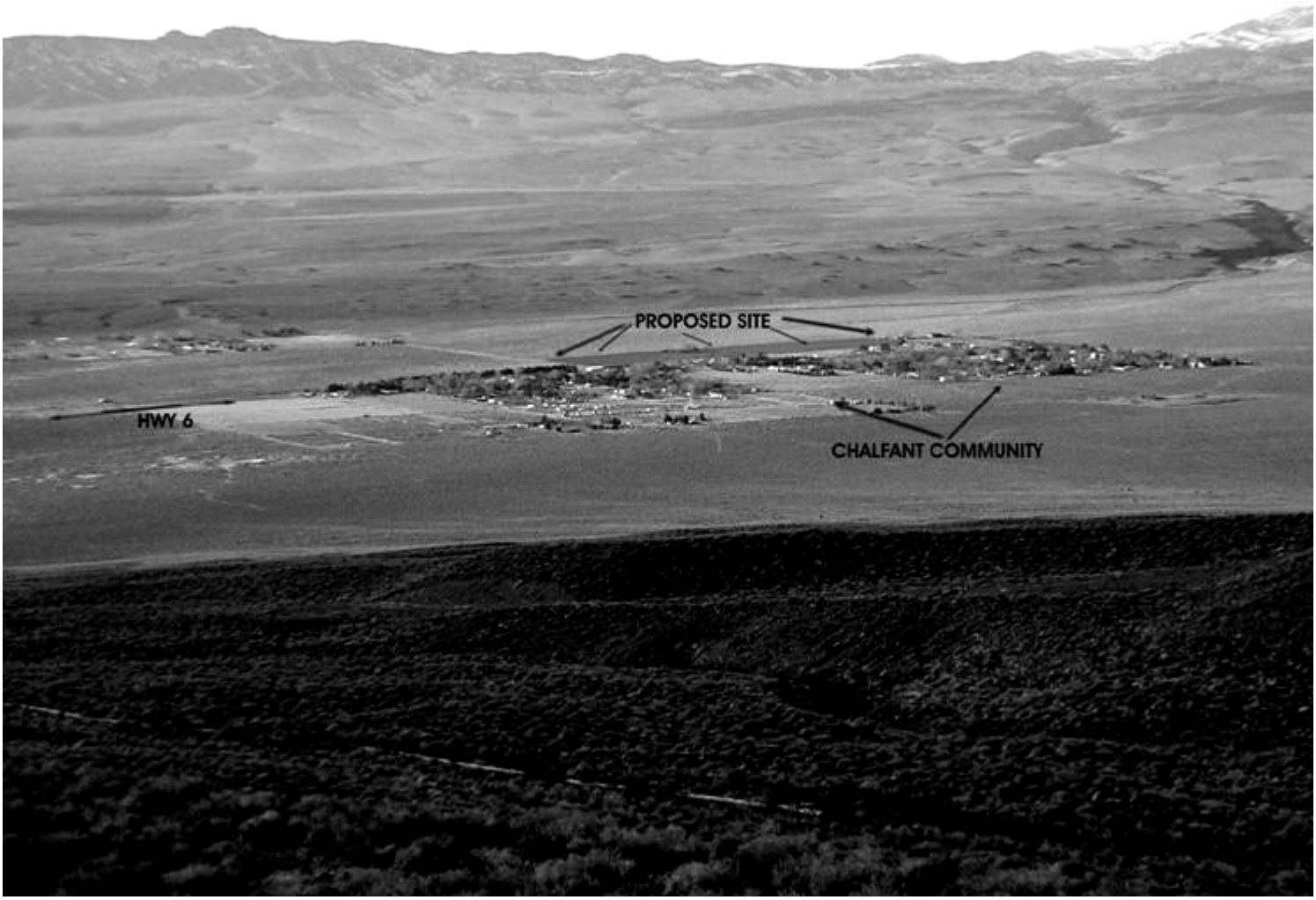


FIGURE 5:
CHALFANT FROM WHITE MOUNTAIN FOOTHILLS

FIGURE 6:
EXISTING SITE & PROPOSED DEVELOPMENT LOOKING SOUTH FROM HWY. 6

FIGURE 7:
EXISTING SITE & PROPOSED DEVELOPMENT, VIEW FROM BROWN SUBDIVISION ROAD, EAST SIDE OF HWY. 6

FIGURE 8:
COMMERCIAL SITE —VISUAL SIMULATION

VISUAL RESOURCE MITIGATION

The following proposed mitigation measures mitigate the environmental impact(s) identified in the previous section:

VR-1 The project shall not have streetlights unless required for safety at key intersections (Mountain Vistas Specific Plan Design Standard DS-9).

VR-2 Exterior lighting at individual residences and on the commercial lot shall be limited to that necessary for safety reasons. Exterior lighting shall be concealed, high intensity lighting shall be avoided, and lighting shall be shielded and directed so that it does not emanate beyond the boundaries of each individual lot. This requirement shall be reiterated in the CC&Rs for the project (Mountain Vistas Specific Plan Design Standard DS-10).

VR-3 Building design for the single-family residences shall be similar to the design prototypes shown in Figure 1 in the Mountain Vistas Specific Plan. This requirement shall be reiterated in the CC&Rs for the project. This standard addresses the building design only; building colors and materials are addressed in mitigation measure VR-8 (Mountain Vistas Specific Plan Design Standard DS-11).

VR-4 The housing installed by Workforce Homebuilders LLC shall be factory-built housing, installed on site on an engineered load bearing foundation system on top of a concrete footing. There shall be at least three floor plans available and at least two exterior elevations per floor plan (Mountain Vistas Specific Plan Design Standard DS-12).

VR-5 Any factory-built housing subsequently installed on the site shall be installed on an engineered load bearing foundation system on top of a concrete footing (Mountain Vistas Specific Plan Design Standard DS-13).

VR-6 Building design for the commercial development shall be consistent with the rural character and setting of Chalfant and shall comply with the following minimum development standards listed in the Mono County General Plan:

a. Projects should not dominate the natural environment, and should complement existing community character; the scale, design, and siting of a project should be appropriate for the setting;
b. Building mass should be varied and should be appropriate for the surrounding community or area;
c. Project siting and structural design should be sensitive to the climate, topography, and lighting of the surrounding environment;
f. The visual impacts of parking areas shall be minimized through the use of landscaping, siting that screens the parking from view, or other appropriate measures.
h. Standardized commercial structures, design, and materials shall not be allowed;
(Mono County General Plan, Conservation/Open Space Element, Visual Resource policies, Objective C, Action 2.1)

(Mountain Vistas Specific Plan Design Standard DS-14)

VR-7 Building heights for residential development shall be limited to a maximum of 25 feet. Building heights for commercial development shall be limited to a maximum of 25 feet, unless a mixed use development is proposed for the commercial lot, with residential uses on the second story. This requirement shall be reiterated in the CC&Rs for the project (Mountain Vistas Specific Plan Design Standard DS-15).

VR-8 In compliance with Mono County's minimum development standards, the color, design, and type of building materials for structures, fences, and signs shall be aesthetically compatible with the natural environment and/or surrounding community. Reflective materials shall not be allowed. Colors shall be muted earth tones; i.e., tans, browns, grays, greens. Roof colors shall be muted, non-reflective dark earth tones; i.e., brown, green. Building materials shall have the appearance of wood, stone, or stucco. This

requirement shall be reiterated in the CC&Rs for the project (Mountain Vistas Specific Plan Design Standard DS-16).

VR-9 One monument sign, designed and installed in compliance with the Mono County Sign Ordinance, shall be allowed at the entrance to the subdivision. No other signs are allowed for the residential development other than the housing number signs required by the Mono County Firesafe Standards, Chapter 22 of the Land Development Regulations (Mountain Vistas Specific Plan Design Standard DS-17).

VR-10 Signs for the commercial development shall comply with the requirements of the Mono County Sign Ordinance, Chapter 7 of the Land Development Regulations (Mountain Vistas Specific Plan Design Standard DS-18).

VR-11 All utilities (electrical, cable, communication lines, water distribution lines, propane distribution lines, etc.) shall be installed underground in conformance with applicable provisions of the Mono County Land Development Regulations. All service connections shall be placed so that public roadways will not have to be cut up for service connections to future residences (Mountain Vistas Specific Plan Design Standard DS-19).

VR-12 All utilities shall be installed to all parcels within each development phase prior to the occupancy of any structure constructed on any parcel within that development phase (Mountain Vistas Specific Plan Design Standard DS-20).

VR-13 Mailboxes shall be clustered and shall be installed by Workforce Homebuilders LLC at a location approved by the Department of Public Works prior to approval of the Final Tract Map. The mailboxes shall be painted a muted earth tone (i.e., tan, green, brown, gray) that blends in with the surrounding environment and is non-reflective (Mountain Vistas Specific Plan Design Standard DS-21).

VR-14 In compliance with Mono County's minimum development standards, visually offensive land uses such as the wells, water storage tanks, and the propane yard shall be adequately screened through the use of landscaping, fencing, contour grading, or other appropriate measures. Landscaping shall occur as shown on the Master Landscape Plan in Appendix A, Map Set (Mountain Vistas Specific Plan Design Standard DS-22).

VR-15 Visually offensive uses resulting from the commercial development, such as propane tanks, solid-waste dumpsters, etc. shall be adequately screened through the use of landscaping, fencing, contour grading, or other appropriate measures. Landscaping on the commercial lot shall occur as shown on the final Landscape Plan adopted for the project (Mountain Vistas Specific Plan Design Standard DS-23).

VISUAL RESOURCE MITIGATION MONITORING

See the mitigation monitoring plan.

CULTURAL RESOURCES

CULTURAL RESOURCE SETTING

Many historic and prehistoric cultural resource sites are known to exist in the Eastern Sierra. Archaeological evidence shows that over the past 2000 years the area was occupied by increasing numbers of humans and that by 1000 years ago the area was inhabited by ancestors of the current Paiute groups. By the end of the nineteenth century, the southern part of Mono County was occupied by groups of the Owens Valley Paiute. Archaeological evidence of this occupation often includes stone flakes, petroglyphs, food grinding tools, and projectile points. During the later part of the 19th century, Europeans were drawn to the area by mining opportunities that typically occurred in the hills and mountains. Cattle ranching and agriculture replaced mining in the early part of the twentieth century.

The project site was utilized for alfalfa production from 1948-1981 and for potatoes from 1981-1982. During that period the site was extensively disturbed and no significant cultural resources were discovered. Due to the prior agricultural use on site, the site's location within an existing community and the fact that there are no historic resources on the project site, a cultural resources study was not conducted for the project.

CULTURAL RESOURCE IMPACTS

No significant cultural resources are known to be present in the project vicinity. No cultural resource impacts are anticipated.

CONCLUSION

The project is not anticipated to result in significant impacts to Cultural Resources; one mitigation measure is suggested to further reduce impacts. The proposed mitigation measures have been incorporated into the Specific Plan as standards and policies.

CULTURAL RESOURCE MITIGATION

The following proposed mitigation measures mitigate the environmental impact(s) identified in the previous section:

CR-1 The project proponent shall stop work and notify appropriate agencies and officials if archaeological evidence is encountered during earthwork activities. No disturbance of an archaeological site shall be permitted until such time as the applicant hires a qualified consultant and an appropriate report that identifies acceptable site mitigation measures is filed with the county Planning Division. Road construction/grading plans shall include such notice (Mountain Vistas Specific Plan Conservation Standard CS-27).

CULTURAL RESOURCE MITIGATION MONITORING

See the mitigation monitoring plan.

CIRCULATION

The information in this section is taken from the **Traffic/Circulation Analysis: Mountain Vistas/White Mountain Estates Projects, Mono County** prepared by LSA Associates, Inc. and from various Caltrans planning documents (www.dot.ca.gov). The complete **Traffic/Circulation Analysis** is included in Appendix B.

HIGHWAY 6 SETTING

U.S. Highway 6 is the primary regional roadway in the project vicinity. Hwy. 6 is a two-lane conventional highway with a functional description of Minor Arterial (Caltrans, District 9, Route Concept Report--Hwy. 6). The travel way is 24 feet wide for the entire length of Hwy. 6 with approximately 4-foot wide shoulders. Caltrans has identified Hwy. 6 as a component of the Interregional Road System (IRRS) and as a Major Connector in the Strategic Highway Network (STRAHNET), indicating that the route is important for the transportation of people and goods.

The Eastern Sierra Bicycle Guide (www.dot.ca.gov) describes Hwy. 6 from Bishop to the Nevada State Line as a 2-lane narrow shoulder highway with gentle gradients, light traffic during the day, and mostly trucks at night. Annual Average Daily Traffic (AADT) traffic figures for Hwy. 6 are shown in Table 3; AADT figures for trucks on Hwy. 6 are shown in Table 4. In 2003, the most

recent year for which traffic counts are available, AADT volumes on Hwy. 6 in the Chalfant area were 1,250 vehicles per day; 288 (23 percent) of those vehicles were trucks. Of the truck traffic, 204 trucks (71 percent) were large trucks with 5 or more axles.

In the vicinity of the project site, two roads intersect Hwy. 6 within a short distance; Chalfant Road at the southeast corner of the project site and Brown's Subdivision Road approximately 500 feet (less than 1/10 of a mile) north of Chalfant Road.

CHALFANT ROAD SETTING

Chalfant Road is a two-lane paved county road with a 60-foot right-of-way and a 23 foot paved travel way in the vicinity of the project site.

MONO COUNTY CIRCULATION ELEMENT & REGIONAL TRANSPORTATION PLAN

The Mono County Circulation Element and the Regional Transportation Plan (RTP) identify the following transportation and circulation needs in the Tri-Valley:

> ***Tri-Valley (Benton, Hammil, Chalfant)***
> Residents are interested in safety and access to the rest of the county. Issues in this area include the provision of adequate and safe access to Rte. 6 with sufficient distances between access points; safety along Rte. 6 during hazardous conditions (primarily dust storms); the provision of rest stops along Hwy. 6; the inclusion of Hwy. 6 into the countywide scenic highway system for its historic significance; and the provision of a bike path connecting Bishop and Chalfant, either by widening the shoulders along Rte. 6 or by providing an alternative route along the abandoned railway lines east of Rte. 6. Residents also believe that there is a need for a fire station and an emergency landing strip in Hammil.

The Circulation Element and the RTP contain the following transportation related goal and policies for the Tri-Valley:

GOAL

Provide a safe and convenient transportation system in the Tri-Valley.

Policy 1: Ensure the safety of the transportation and circulation system in the Tri-Valley.

Action 1.1: Work with Caltrans and the California Highway Patrol to minimize the hazards associated with dust blowing across Hwy. 6.

Action 1.2: Coordinate new development with the White Mountain Fire Protection District and the Chalfant Community Services District to ensure adequate emergency access.

Action 1.3: Designate a site for a landing strip in Hammil for agricultural and emergency use.

Policy 2: Provide a bike route from the Inyo/Mono County line to Chalfant.

Action 2.1: Consider widening the shoulder along Hwy. 6 as part of future road improvements.

Action 2.2: Investigate the feasibility of establishing a bike trail along the abandoned railway right-of-way east of Hwy. 6 in Mono County.

Policy 3: Consider designating a bike route from Chalfant to Fish Slough.

Policy 4: Study the feasibility of providing rest stops or turnouts along Hwy. 6 throughout the Tri-Valley area.

Policy 5: Consider designating Hwy. 6 as a scenic highway/byway.

Action 5.1: Amend the Mono County General Plan's scenic highway system to include Hwy. 6, if supported by Tri-Valley residents.

CALTRANS IMPROVEMENT PLANS IN THE CHALFANT AREA

Caltrans and the Mono County Local Transportation Commission have entered into a Capital Project Charter (Chalfant Safety Improvements) to address traffic speeds and turning conflicts that cause safety concerns in the Chalfant area. Hwy. 6 is a 60 mph two-lane state highway without turn pockets in a developing community area; the Chalfant Safety Improvements project is intended to provide highway improvements to reduce turning conflicts in the community of Chalfant. Caltrans has indicated in the past that residential development in the area should coordinate with the proposed safety improvements and the potential phasing of the improvements with developer's funding mitigating the impacts of the proposed development. Figure 5b in Appendix A-Map Set shows Caltrans overall plans for improvements along Hwy. 6 in the vicinity of its intersection with Chalfant Road.

CIRCULATION IMPACTS—TRAFFIC VOLUMES

In the traffic analysis prepared for the project, LSA Associates Inc. estimated short-range (2009) and long-range (2025) traffic volumes through the application of a growth rate to existing traffic volumes. A 3% annual growth rate, compounded for five years (short-range) and 21 years (long-range), was applied to existing through volumes along Hwy. 6 to forecast future volumes.

LSA developed trip generation rates for the project based on traffic counts collected at the intersection of Hwy. 6 and Chalfant Road. Existing annual average daily traffic (AADT) volumes along Hwy. 6 were taken from the most recent Caltrans traffic counts. LSA Associates also had existing a.m. and p.m. peak hour turn movement volumes collected at Hwy. 6 and Chalfant Road and at Hwy. 6 and Brown's Subdivision Road. The counts at Hwy. 6 and Chalfant Road were utilized for the project impact assessment as well as to establish a trip rate for existing and planned residential uses.

LSA's methodology in developing trip generation rates is discussed in the following excerpt from the **Traffic/Circulation Analysis** prepared for the project (note that the **Traffic/Circulation Analysis** was prepared for the Mountain Vistas project, here referred to as the Brown property, and for another proposed subdivision in south Chalfant, White Mountain Estates or the Estates project).

> LSA reviewed sources for standard residential and retail trip rates, such as the Institute of Transportation Engineers (ITE), Trip Generation, Seventh Edition. The standard residential trip rate structure of 10.00 trips per day per unit and associated peak-hour rates are based on surveys of urban and suburban areas that have more robust land development to provide the attractions sought by residents (i.e., shopping, leisure, entertainment). Instead of using these standard trip rates, and overestimating the potential trip making of the Bown and the Estates projects, LSA collected traffic counts at Hwy. 6/Chalfant Road and developed trip rates based on the existing 41 residential units in the area [*i.e. in West Chalfant*]. Based on the peak-hour traffic counts in and out of Chalfant Road at Hwy. 6 (illustrated in Figure 4), peak-hour rates included in Table A were developed. The peak-hour residential rates are roughly 65% of the standard residential trip rates included in the ITE source. The daily residential rate is estimated based on a 10 to 1 factor of daily to p.m. peak-hour trip making for single-family units.
> (LSA Associates, Inc., Traffic/Circulation Analysis, p. 2)

> Retail trip rates originate from the ITE *Trip Generation*, Seventh Edition, for shopping center (Land Use Code 820). However, similar to the residential use, the retail attraction does not have a large population to draw from to result in robust trip generation. Therefore, the ITE retail rates were adjusted by 65% to reflect the same relation of observed to ITE-estimated rates for residential. Additionally, much of the retail traffic will be attracted from Hwy. 6 as pass-by traffic, a retail trip purpose satisfied at this site on a much longer trip destination. Based on surveys included in the *ITE Trip Generation Handbook*, pass-by percentage is estimated at 55% of the gross trip generation. These trips are already on Hwy. 6, but will leave the through movement and turn onto the site. Once satisfied, they will get back onto Hwy. 6 and their ultimate destination. These pass-by trips are removed from the appropriate through movement and added to the respective turn movement into/out of the site. The total gross trip generation (new trips and pass-by trips) is accounted for at the driveway at Chalfant Road.
> (LSA Associates, Inc., Traffic/Circulation Analysis, p. 3)

Figure 4 and Table A from the Traffic/Circulation Analysis, which are referred to in the above excerpts, are included on the following pages as Figure 9 and Table 3 in this document.

Project trips were assigned to the local intersections and Hwy. 6 based on a trip distribution reflecting 85% origin/destination to the south and 15% origin/destination to the north. These directional splits were derived from the traffic counts collected at Hwy. 6/Chalfant Road.

Levels of service (LOS) were determined for existing, short-range (2009), and long-range (2025) scenarios with and without the project. Without the project, the level of service for Hwy. 6/Chalfant Road will remain at LOS A throughout the long-range planning scenario (2025). With the project, the LOS for that intersection will remain at LOS A for the existing time period and the AM peak hour (short-range/2009), and will be at LOS B for the PM peak hour (short-range/2009) and both AM and PM peak hours (long-range/2025).

The Traffic/Circulation Analysis concludes that the Chalfant Road/Hwy. 6 intersection "will operate at excellent levels of service in all horizons without and with the project" (LSA Associates, Inc., p. 3) and that the project will not result in impacts related to traffic volume, congestion, or level of service.

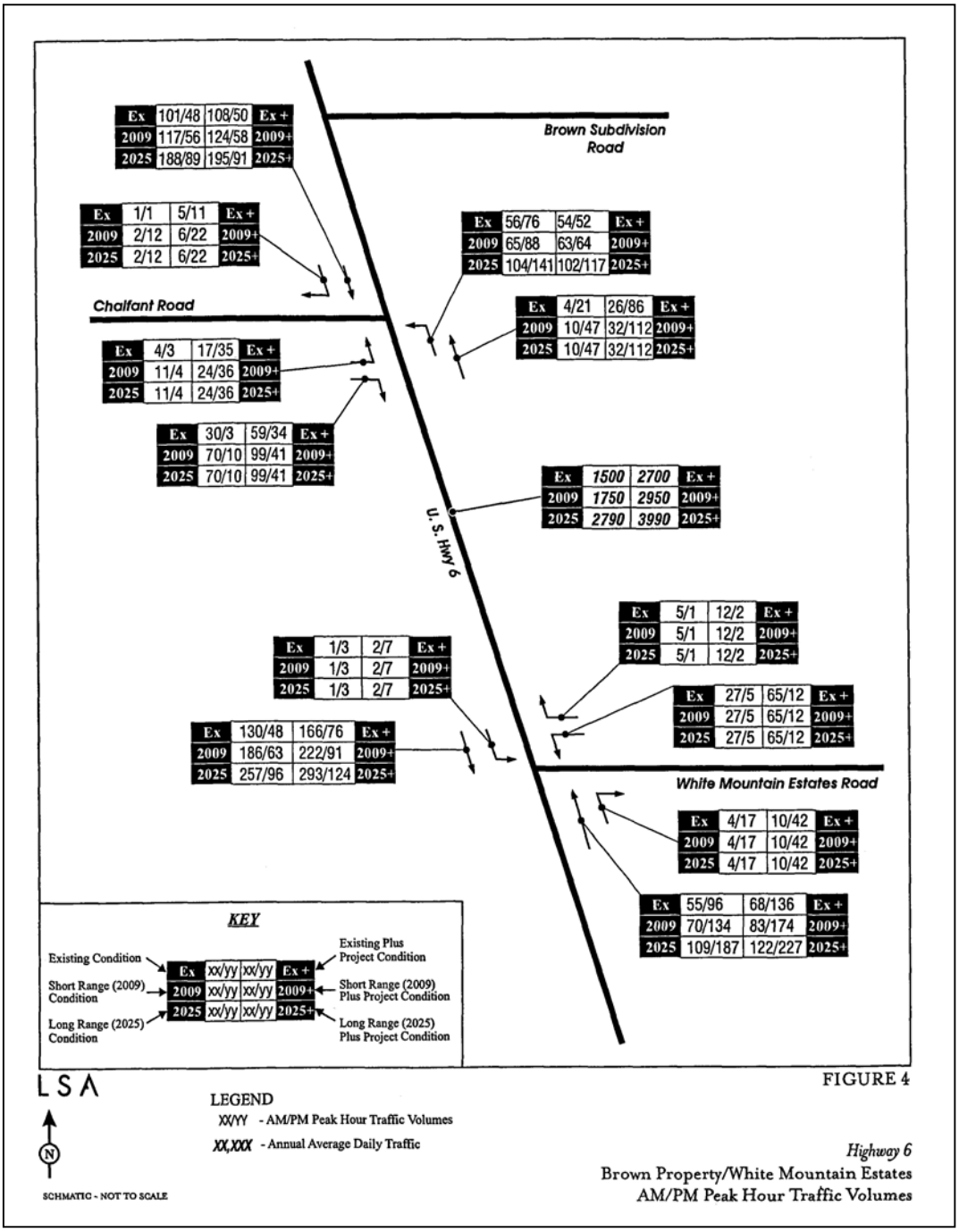


FIGURE 9:
Mountain Vistas AM/PM Peak Hour Traffic Volumes

Table A - Brown Property/White Mountain Estates Trip Generation Summary

Land Use	Size	Units	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates									
Low Density Residential[1]		DU	6.50	0.12	0.79	0.91	0.51	0.14	0.65
Neighborhood Commercial[2]		TSF	87.84	1.36	0.87	2.24	3.81	4.13	7.94
Trip Generation									
Low Density Residential									
Brown Property	48	DU	312	6	38	44	24	7	31
White Mountain Estates	57	DU	371	7	45	52	29	8	37
Neighborhood Commercial	14	TSF	1,230	19	12	31	53	58	111
Pass-By Percentage (55%)[3]			676	11	7	17	29	32	61
Net New Trips			553	9	5	14	24	26	50

[1] Peak hour directional trip rates based on surveys at Highway 6/Chalfant Road. Daily rate is 10 times the p.m. peak hour rate.

[2] Rates are based on 65 percent of ITE Shopping Center rate for 14,000 square foot use.

[3] Pass by percentage is from the ITE *Trip Generation Handbook*, 5th Ed., page 62. It is the average of the sample of sites less than 50,000 sq. ft.

TABLE 3:
Mountain Vistas Trip Generation Summary

Note: The Mountain Vistas project is referred to in this table as the Brown Property.

CIRCULATION IMPACTS—TURN LANE GEOMETRICS

While levels of service are forecast to remain good with the development of the project, operational and geometric issues were evaluated by LSA given the existing setting and traffic characteristics. Highway 6 is a truck route, with approximately 23% of all vehicles traveling on the route being trucks. The roadway is flat with few lateral obstructions to slow traffic; as a result, traffic, including the trucks, moves at high speed along Hwy. 6. Caltrans and Mono County, through the Mono County Local Transportation Commission, have recognized the safety issues associated with turning conflicts in the Chalfant area and have entered into a Capital Project Charter (Chalfant Safety Improvements) to address those concerns.

The development of the project will increase the demand for turn movements along Hwy. 6 in Chalfant. At the Chalfant Road intersection with Hwy. 6 the project will increase the north-bound left-turn demand by 65 vehicles per hour in the p.m. peak hour. The increase in turn volume has the potential to increase safety concerns at that intersection.

The Traffic/Circulation Analysis concluded that "to address turn volume increases and potential safety concerns, turn lane channelization is recommended prior to the use and occupancy of the Brown project" (LSA Associates, Inc., p. 4). Discussions among Mono County, LSA Associates, Inc., Caltrans and the project proponent resulted in the off-site access improvements alternatives shown in Figure 5A, 5B and 5C in Appendix A—Map Set; i.e.,

- **Alternative 5A** was developed by LSA Associates. It provides deceleration lanes on Hwy. 6 north and south of the intersection with Chalfant Road in order to increase safety for traffic entering and exiting Chalfant Road. The northbound lane of Hwy. 6, including the right turn lane for Brown Subdivision Road, remains unchanged.

- **Alternative 5B** was developed by Caltrans. It provides deceleration lanes on Hwy. 6 at the intersection with Chalfant Road and connection of Brown Subdivision Road and Klamath Trail to create a new four-way intersection. From Chalfant Road, traffic would only be permitted to turn right (south) onto Hwy. 6. Traffic from West Chalfant and from the project site wishing to turn left (north) onto Hwy. 6 would have to use the Brown Subdivision Road/Klamath Trail intersection.

- **Alternative 5C** was developed by Mono County. It abandons the intersection of Chalfant Road and Hwy. 6 and a portion of Chalfant Road west of that intersection. Chalfant Road enters the project site at the southwest corner and follows a slight S-curve to intersect with Hwy. 6 at the Brown Subdivision Road intersection. This alternative results in additional lots that the project proponent considers necessary to pay for the additional road construction.

Figure 5D in Appendix A shows a regional access map for the area. Hunter Avenue, which currently intersects Hwy. 6 from the east, south of the project site, may be extended to West Chalfant in the future if significant development occurs in the West Chalfant area. If that were to occur, there would be three intersections with Hwy. 6 within less than ½ mile in the Chalfant area.

All alternatives fulfill CEQA requirements for mitigation. The project proponent does not agree with the second alternative, believing that it requires additional mitigation and enhancements

that are not related to the impacts that will result from the project. The alternative developed by Mono County is discussed further in the Alternatives Analysis of this document since it reconfigures the project and results in additional residential lots greater than the number proposed for the project.

TABLE 4: Annual Average Daily Traffic, Route 6, Mono County

	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak Hour	Ahead Peak Month	Ahead AADT
Mono County Line	-----	-----	-----	140	1,550	1,250
Benton Station 120(W)	140	1,550	1,250	100	1,100	930
Source: Caltrans AADT figures for 2003, www.dot.ca.gov						

TABLE 5: Annual Average Daily Truck Traffic, Route 6, Mono County

	Vehicle AADT Total	Truck AADT Total	Trucks as % of Total Vehicles	Truck AADT Total By Axle			
				2	3	4	5+
Benton Station 120(W) northbound traffic	930	223	24	54/24%	16/7%	2/1%	152/68%
Benton Station 120(W) southbound traffic	1,250	288	23	66/23%	14/5%	3/1%	204/71%
Source: Caltrans AADT figures for trucks for 2003, www.dot.ca.gov							

PEDESTRIAN AND BICYCLE FACILITIES

There are currently no pedestrian or bicycle facilities in Chalfant.

CIRCULATION IMPACTS—PEDESTRIAN & BICYCLE

There are currently no pedestrian or bicycle facilities in Chalfant. Policies in the Mono County Circulation Element and the Regional Transportation Plan (RTP) promote the development of additional facilities throughout the county for non-motorized means of transportation. Applicable goals, objectives and policies from the Circulation Element and RTP are listed below:

GOAL I **Provide for the use of non-motorized means of transportation within Mono County.**

POLICY 1: Develop and implement multimodal transportation plans for all community areas to provide for the development of well-coordinated and designed non-motorized and motorized transportation facilities.

Objective 1.2: Develop multimodal plans for the Antelope Valley, Bridgeport, Crowley Lake, Wheeler Crest, and Tri-Valley and implement those plans once they are adopted.

POLICY 2: Seek opportunities for federal, state, county, town, and private participation, when appropriate, in the construction and maintenance of non-motorized facilities.

Objective 2.1: Seek partnership opportunities for the following projects:
Countywide bicycle trail development
Pedestrian improvements in community areas
Transportation options to Bodie State Historic Park
Other non-motorized transportation projects as applicable.

POLICY 4: Develop a safe and convenient pedestrian circulation system as a portion of the total transportation network.

Objective 4.1: Plan and implement Livable Communities Principles and Elements (for further information see **Livable Communities for Mono County Report,** Draft, January 30, 2000):

- Principle 1 Provide a quarter-mile radius development pattern with a mix of uses within that area.
- Principle 2 Limit speeds to moderate levels (20-30 mph) and roads to a total of two lanes.
- Principle 3 Landscape edges and walkways and screen parking areas.
- Principle 4 Create well-connected and easy street crossings.
- Principle 5 Pedestrian facility design should meet the five basic human needs for security, convenience, efficiency, comfort, and welcome.

Denser development, such as that proposed for the Mountain Vistas Specific Plan area, creates easier access for pedestrians and bicyclists and creates the need to develop facilities to meet that need. In compliance with the Circulation Element and RTP policies stated above, the Mountain Vistas Specific Plan contains policies and design standards that require the installation of a pedestrian pathway in the eastern right-of-way of the main access road throughout the development and the installation of zebra stripe crosswalks where appropriate to provide safe access between the residential uses and the commercial uses. The project will not create a significant impact to pedestrian or bicycle facilities in the area.

TRANSIT

Inyo-Mono Transit provides transit service from Benton to Bishop on Tuesdays and Fridays. The bus stops at the Chalfant Mercantile in the morning and on the return trip in the afternoon. Eastern Sierra Unified School District provides school bus service for students in the area.

TRANSIT IMPACTS

Inyo-Mono Transit currently provides twice weekly transit services between Benton and Bishop which stops at the Chalfant Mercantile. School bus services are provided by Eastern Sierra Unified School District. Policies in the Mono County Circulation Element and the Regional Transportation Plan (RTP) promote the development of additional transit facilities throughout the county. Applicable goals, objectives and policies from the Circulation Element and RTP are listed below:

GOAL I **Assist with the development and maintenance of transit systems as a component of multi-modal transportation systems in Mono County.**

POLICY 1: In association with other regional and local agencies, provide transit services that are responsive to the future needs of commuters and transit dependent persons (e.g. senior citizens, disabled persons, youth, persons without cars).

Objective 1.1: Maintain and improve transit services for transit dependent citizens in Mono County, including the continuation and improvement of social service transportation services. Ensure that transit services comply with the requirements of the Americans with Disabilities Act (ADA).

Objective 1.2: Support public transit financially to the level determined 1) by the "reasonable to meet" criteria during the annual unmet needs hearing, and 2) by the amount of available funds.

Objective 1.4: Pursue all available funding for the provision of transit services and facilities, including state and federal funding and public/private partnerships.

Objective 1.6: Work with appropriate agencies to coordinate the provision of transit services in the county in order to provide convenient transfers and connections between transit services.

POLICY 2: Promote the development of an inter-modal transportation system in Mono County that coordinates the design and implementation of transit systems with parking facilities, trail systems, and airport facilities.

Objective 2.1: Coordinate the design and implementation of transit systems with parking facilities, trail systems, and airport facilities, including convenient transfers among transit routes and various transportation modes.

Objective 2.3: Require major traffic generating projects to plan for and provide multiple modes of circulation/transportation. This may include fixed transit facilities, such as bus turnouts and passenger shelters.

The project is estimated to add 120 new residents to Chalfant, 30 school-age children, 74 persons aged 18-64, and 16 persons 65 years old or older (see Population, Housing, Employment section). School-age children and seniors are often considered transit-dependent. In compliance with the Circulation Element and RTP policies stated above, the Mountain Vistas Specific Plan contains policies that require the project proponents to provide a transit shelter to serve school children and the on-demand transit system. The project will not create significant impacts to transit services.

CONCLUSION

The project will not create significant impacts related to traffic volume, congestion, level of service, pedestrian and bicycle facilities, or transit services. Potentially significant impacts will be present

with regard to turn volume increases and associated safety concerns; mitigation measures are required to reduce impacts to less-than-significant levels. The proposed mitigation measures have been incorporated into the Specific Plan as standards and policies.

CIRCULATION MITIGATION

The following proposed mitigation measures mitigate the environmental impact(s) identified in the previous section:

C-1 Provide off-site access improvements as specified in Figure 5 (Master Off-Site Access Improvements) in Appendix A--Map Set

Note: Figure 5 contains three alternatives. All alternatives fulfill CEQA requirements for mitigation. The project proponent does not agree with the second alternative, believing that it requires additional mitigation and enhancements that are not related to the impacts that will result from the project. One of the alternatives will need to be chosen as the final configuration for the off-site access improvements prior to approval of the final tract map for the project.

(Mountain Vistas Specific Plan Circulation Policy 5-B).

C-2 An encroachment permit shall be obtained from Caltrans prior to approval of the final tract map (Mountain Vistas Specific Plan Circulation Program 5-B).

C-3 Prohibit direct access from Hwy. 6 to the commercial lot (Mountain Vistas Specific Plan Circulation Policy 5-C).

C-4 The final tract map for the project shall indicate the access point for the commercial lot (Mountain Vistas Specific Plan Circulation Program 5-C).

C-5 Work with Caltrans to provide as safe as feasible crossing of Hwy. 6 from the commercial lots to commercial and community facilities on the east side of Hwy. 6 in Chalfant. A safe as feasible crossing shall be established within one year of the completion of housing on the project site (Mountain Vistas Specific Plan Circulation Program 6-B).

CIRCULATION MITIGATION MONITORING

See the mitigation monitoring plan.

NOISE

The information in this section is taken from the **Noise Impact Analysis: Chalfant Valley/APN 26-210-37** prepared by LSA Associates, Inc. The complete **Noise Impact Analysis** is included in Appendix B.

EXISTING NOISE ENVIRONMENT

The primary existing noise source in the project vicinity is traffic, primarily on Hwy. 6 but also on Chalfant Road. Existing residential uses are located on the east side of Hwy. 6, approximately 100 feet from the project site. Those residential uses are considered sensitive receptors and could be affected by noise impacts from the proposed project.

NOISE IMPACTS

A project will normally have a significant effect on the noise environment if it will substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals for the community in which it is located. The Mono County Noise Element and the Noise Regulations (Chapter 10.16 of the Mono County Code) regulate the noise environment in Mono County.

The proposed project would result in short-term construction related noise impacts and long-term traffic noise impacts. Short-term construction related noise impacts would be associated with excavation, grading, and construction activities on site during construction of the proposed project. Construction related short-term noise levels would be higher than the existing ambient noise levels in the project area but would no longer occur once construction is completed. The nearest sensitive noise receptors to the project site are the existing residential uses located approximately 100 feet east of the project site across Hwy. 6. Those residential uses could potentially be exposed to intermittently high noise levels reaching 85 dBA, well above the 65 dBA considered acceptable as the exterior noise standard. Compliance with the construction hours specified in the county's Noise Regulations will reduce the construction related noise impacts to a less-than-significant level.

The proposed residential units near Hwy. 6 could potentially be exposed to significant long-term traffic noise from Hwy. 6 exceeding the exterior noise standard of 65 dBA CNEL and/or the interior noise standard of 45 dBA CNEL. Mitigation would be required to reduce potential long-term traffic related impacts to a less-than-significant level.

The county's Noise Element does not specify a noise standard for outdoor living areas associated with residential uses, such as backyards or side yards. Front yards or driveways are not considered noise sensitive. The State guidelines indicate that residential uses are normally acceptable in exterior noise environments up to 60 dBA CNEL and conditionally acceptable in exterior noise environments up to 70 dBA CNEL (when adequate building insulation would provide sufficient noise attenuation to meet the 45 dBA CNEL interior noise standard). For planning purposes, the 65 dBA CNEL is considered by many local jurisdictions as the exterior noise standard for transportation related noise impacts.

Mitigation proposed in the Noise Impact Analysis includes a six-foot sound wall along the project's eastern property line adjacent to Lots 4, 5, 11, 12, 13, and 20 in order to reduce exterior noise levels to acceptable levels on those lots and an eight-foot sound wall along the northern property line of Lot 1. Mitigation proposed to reduce interior noise levels to acceptable levels includes the installation of a form of mechanical ventilation in all frontline units facing traffic from Hwy. 6 on Lots 1, 4, 5, 11-13, 20-25, and 40-43. The proposed sound walls would be tan slump block concrete masonry. Landscaping consisting of undulating berms, shrubs and trees would be planted on the Hwy. 6 side of the wall. However, CDD staff felt that the proposed sound walls would create a visual impact and provided an urban solution for a rural area.

Subsequent discussions with LSA Associates, Inc. the consultants for the Noise Impact Analysis, provided additional alternatives for noise mitigation. The sound wall could be eliminated from the eastern property line if houses on the affected lots (i.e. Lots 4, 5, 11, 12, 13, 20, and 21) face Hwy. 6 since front yards are not considered noise sensitive areas. Building envelopes established on the Final Tract Map will consider noise impacts on identified lots. A berm will be installed on the eastern property line of the project to provide additional relief. The berm will be landscaped with shrubs and trees and will have culverts installed to allow for flow-through of flood waters. Along Lots 4 and 5 the berm will be six feet tall; from Lot 11 south the berm will be 4 feet tall.

On Lot 1, the berm on the eastern property line will be 4 feet tall and there will be a six foot tall wall starting at the western edge of the berm and continuing west along the northern property line to where the 65 CNEL line crosses the property. There will be a 4 to 5 foot wide strip of landscaping along the north side of the wall. The wall and the landscaping will be in an easement placed on the property for that use.

CONCLUSION

Potentially significant impacts will be present with regard to Noise; mitigation measures are required to reduce impacts to less-than-significant levels. The proposed mitigation measures have been incorporated into the Specific Plan as standards and policies.

NOISE MITIGATION

The following proposed mitigation measures mitigate the environmental impact(s) identified in the previous section:

N-1 Construction shall be limited to daylight hours in accordance with the Mono County Noise Regulations (Mono County Code Section 10.16) in order to minimize impacts to nocturnal wildlife species and adjacent sensitive noise receptors (Mountain Vistas Specific Plan Conservation Standard CS-1).

N-2 Noise levels during all construction activities shall be kept to a minimum by equipping all on-site equipment with noise attenuation devices and by compliance with all requirements of the Mono County Noise Regulations (Mono County Code Section 10.16) (Mountain Vistas Specific Plan Conservation Standard CS-2).

N-3 During all construction activities, all stationary construction equipment shall be placed so that emitted noise is directed away from sensitive receptors nearest the project site; i.e., residential uses located across Hwy. 6 (Mountain Vistas Specific Plan Conservation Standard CS-3).

N-4 During all construction activities, equipment staging areas shall be located the greatest distance possible from the nearest sensitive noise receptors; i.e., residential uses across Hwy. 6 (Mountain Vistas Specific Plan Conservation Standard CS-4).

N-5 Houses on Lots 4, 5, 11, 12, 13, 20, and 21 shall be sited facing Hwy. 6 (Mountain Vistas Specific Plan Conservation Standard CS-5).

N-6 Building envelopes established on the Final Tract Map for the project shall consider noise impacts on Lots 1, 4, 5, 11, 12, 13, 20, 21, and shall site the building envelope to provide the maximum setback from the eastern property edge (Mountain Vistas Specific Plan Conservation Standard CS-6).

N-7 A six-foot tall berm shall be installed along the eastern property line of the project east of Lots 4 and 5. A four to five-foot tall berm shall be installed along the eastern property line from east of Lot 11 south to the commercial lot. The Final Tract Map for the project shall include the berm, culverts in the berm to allow for flow-through of flood waters, and landscaping proposed for the berm (Mountain Vistas Specific Plan Conservation Standard CS-7).

N-8 On Lot 1, the berm on the eastern property line shall be 4 feet tall, there shall be a six foot tall wall starting at the western edge of the berm and continuing west along the northern property line to where the 65 CNEL line crosses the property, and there shall be a 4 to 5 foot wide strip of landscaping along the north side of the wall. Prior to approval of the Final Tract Map, the wall and the landscaping shall be located in an easement placed on the property for that use (Mountain Vistas Specific Plan Conservation Standard CS-8).

N-9 In compliance with the recommendations listed in the Noise Impact Analysis prepared for the project, some form of mechanical ventilation shall be installed in all frontline units facing traffic from Hwy. 6, including Lots 1, 4, 5, 11-13, 20-25, and 40-43 (Mountain Vistas Specific Plan Conservation Standard CS-9).

NOISE MITIGATION MONITORING

See the mitigation monitoring plan.

AIR QUALITY

EXISTING AIR QUALITY

As of 2003, Mono County was designated a non-attainment area for the state PM_{10} standard as well as for the ozone standard (see www.arb.ca.gov, State Area Designations Maps). The PM_{10} classification is for Mono Basin and Mammoth Lakes. Particulate matter (PM_{10}) in the Mono Basin results from dust from the exposed lakebed of Mono Lake. PM_{10} in Mammoth Lakes is primarily a problem in winter, resulting from wood burning and resuspended road cinders. Overall in Mono County, the sources of most PM_{10} emissions are unpaved road dust/cinders, fugitive windblown dust, and woodstove emissions.

The ozone designation is also for Mammoth Lakes. In the past, the State Air Resources Board concluded that ozone levels in the Great Basin Air Basin (Alpine, Inyo and Mono counties) that exceeded the state standard were caused by transport from the San Joaquin Valley Air Basin; the Great Basin Unified Air Pollution Control District adopted an Ozone Attainment Plan for Mono County that identified the county as an ozone transport area.

The county is also designated a moderate non-attainment area for the national PM_{10} standard, again for particulate matter in the Mono Basin (www.epa.gov/air).

Although there are no air quality data specifically for the Tri-Valley area, the Mono County MEA notes that fugitive windblown dust is a problem in the area, primarily when it creates a safety hazard by blowing across Hwy. 6.

AIR QUALITY IMPACTS

The project site is in a very dry desert environment that receives on average only 5.22 inches of rainfall per year. It is in a relatively flat open area with low-growing sparse sagebrush scrub vegetation. Strong winds are common and windblown dust is known to be a problem in the area. The prevailing wind direction in the area is from the north ten months of the year and from the south in November and December, based on data collected at the Bishop Airport climatological station, the nearest station to Chalfant (see Table 2 in the Geology/Soils section). Average annual wind speed is 9 mph); average annual peak gusts are 70 mph (see Table 2).

Construction activities may create temporary impacts to air quality, primarily by creating dust. Driveways and roadways in the project will be paved. In compliance with Mono County General Plan policies, Mountain Vistas Specific Plan conditions require that any wood-burning appliances installed in the project be Phase II EPA certified and that wood-burning appliances be used only as a secondary heating source. Mountain Vistas Specific Plan policies also require land disturbance to be minimized and dust generated during construction to be controlled.

Over the life of the project, disturbed areas that are not revegetated could cause ongoing dust and air quality impacts. Windblown dust from undeveloped land surrounding the project site could impact housing on the project site. Mountain Vistas Specific Plan policies require the project proponents to plant a windbreak along the north and south property lines of the project site to act as a dust barrier in order to reduce dust and windborne erosion over the life of the project and to delineate driveways and building envelopes for all lots on the final tract map in order to minimize site disturbance. Landscaping along the Hwy. 6 frontage and street trees on roads within the project will also help reduce impacts from wind and dust.

CONCLUSION

Potentially significant air quality impacts may occur as a result of the project; mitigation measures are required to reduce impacts to a less-than-significant level. The proposed mitigation measures have been incorporated into the Specific Plan as standards and policies.

AIR QUALITY MITIGATION

The following proposed mitigation measures mitigate the environmental impact(s) identified in the previous section:

AQ-1 Only high efficiency heating systems shall be installed in the residences. No units shall have wood-burning appliances as the primary heating source (Mountain Vistas Specific Plan Conservation Standard CS-10).

AQ-2 In compliance with Mono County General Plan policies, any wood-burning appliances installed in the project shall be Phase II EPA certified (Mono County General Plan, Conservation/Open Space Public Health and Safety policies, Objective A, Action 6.1). This requirement shall be reiterated in the CC&Rs for the project (Mountain Vistas Specific Plan Conservation Standard CS-11).

AQ-3 An air quality permit shall be obtained from the Great Basin Unified Air Pollution Control District, if necessary (Mountain Vistas Specific Plan Conservation Standard CS-12).

AQ-4 A final Grading Plan, based on the preliminary grading and drainage plan in this document, must be approved by the Mono County Department of Public Works prior to the commencement of any development activities. The Grading Plan must include a comprehensive erosion and sediment transport control plan (Mountain Vistas Specific Plan Conservation Standard CS-13).

AQ-5 Building envelopes and driveways shall be established on the final tract map for all lots in order to reduce site disturbance and associated dust, to avoid noise impacts to the residential units, and to minimize flood impacts (Mountain Vistas Specific Plan Conservation Standard CS-14).

AQ-6 In order to minimize the potential for dust erosion, land disturbance (grading, cut and fill) for road construction, infrastructure installation, and building construction shall be limited to the areas identified on the final tract map for roads, utilities, building envelopes, and driveways (Mountain Vistas Specific Plan Conservation Standard CS-15).

AQ-7 Dust generated during construction shall be controlled by the use of watering or other Best Management Practices (Mountain Vistas Specific Plan Conservation Standard CS-16).

AQ-8 Speed limits on the construction site shall be reduced to minimize dust and windborne erosion (Mountain Vistas Specific Plan Conservation Standard CS-17).

AQ-9 Construction materials (rock, debris, etc.) that are not utilized as road fill shall be removed to a designated landfill or approved site (Mountain Vistas Specific Plan Conservation Standard CS-18).

AQ-10 The project proponent shall plant a windbreak along the northern and southern perimeters of the project site in order to reduce dust and windborne erosion over the life of the project. An easement for this windbreak shall be included on the final tract map for the project. The windbreak shall also be included on the final Landscape Plan for the project and its ongoing existence and maintenance shall be addressed in the CC&Rs for the project (Mountain Vistas Specific Plan Conservation Standard CS-19).

AQ-11 The project proponent shall prepare a Stormwater Pollution Prevention Plan (SWPPP) and submit a Notice of Intent to comply with provisions of the State Water Resources Control Board's Stormwater NPDES Permit for Construction Activities. A letter of clearance and/or waste discharge requirements from the Lahontan Regional Water Quality Control Board is

required prior to grading/disturbance/construction of any kind (Mountain Vistas Specific Plan Conservation Standard CS-20).

AIR QUALITY MITIGATION MONITORING

See the mitigation monitoring plan.

WATER RESOURCES

WATER RESOURCES SETTING

The project site is located in an arid desert environment, in an area that receives an average of 5.22 inches of rainfall per year. There are no surface waters on the project site. Seasonal drainages are located to the north and west of the project site (see Figure 2 in the Water Well Feasibility and Siting Study in Appendix B).

The Mono County MEA provides the following information concerning water resources in the Tri-Valley:

> The Benton, Hammil and Chalfant valleys form a northern extension of the Owens Valley. The three valleys form a single watershed that is tributary to the Owens River (Williams, 1979). The valleys are bounded on the east by the White Mountains and on the west by the southeast sloping lava flows of the Volcanic Tablelands and the Benton Range.
>
> Runoff from the White Mountains, the Volcanic Tablelands, and the Benton Range flows into these valleys and ultimately drains into the Owens Valley, in Inyo County. Streams originating in the White Mountains contribute most of the runoff in this watershed. The streams draining the slopes on the western side of this watershed generally do not contribute much water to the area. All of these drainages are ephemeral, except for the reach immediately downstream of Benton Hot Springs which contains a small, year-round, seepage flow. An ephemeral wash drains the length of the watershed from Benton to Laws in Inyo County. This wash is the main stem of the drainage system and, during periods of heavy precipitation, it conveys floodwaters downstream (Williams, 1979). Most of the runoff in this basin is either captured as surface water and used for irrigation on local farms, or it drains into the valley's deep alluvium and is captured as groundwater.
>
> Most agricultural and domestic water supplies in these valleys are derived from underground aquifers (Williams, 1979). Groundwater movement generally follows the surface topography and there is a net movement of groundwater from north to south from the Benton Valley through the Hammil Valley into the Chalfant Valley. Some of the unrecovered groundwater in these valleys flows underground to the Owens Valley.
>
> Many of the farmers in these valleys use a mixture of surface water and groundwater to irrigate their crops. Their surface water supplies are obtained from small streams which drain the White Mountains and from natural springs. Despite the fact that many of the area farmers use some surface water supplies, virtually all of them depend on groundwater to fulfill the intensive irrigation requirements of alfalfa production. Groundwater supplies in the area are adequate to meet current needs with a possible surplus to accommodate a reasonable amount of future growth (Williams, 1983).
>
> Groundwater levels are seasonally affected by variations in precipitation, but they are also affected by pumping drawdown and indirectly by the diversion of streamflow on the alluvial fans that would normally recharge the aquifer. In the Benton Valley, no water table data is available, but

groundwater levels appear to be stable with depths to groundwater at approximately 30 to 40 feet. In the Hammil Valley, water table levels have been dropping since the mid-1960's as irrigation pumping has increased. In the Chalfant Valley, only a small amount of pumping takes place and water levels have thus experienced only a small decline (Williams, 1983). The declines in the Hammil Valley have been caused primarily by an increase in the amount of agricultural land put into production. It is estimated that at the current level of agricultural production, the groundwater table in the Hammil Valley will stabilize within 50 feet of the present level. The decline in groundwater levels in the Chalfant Valley is caused mainly by LADWP's pumping of groundwater in Laws. Since 1970, LADWP has pumped an average of 17,000 acre-feet per year from this area. Given this rate of pumping and the present land use conditions, it is estimated that groundwater levels in the Chalfant Valley will experience an additional decline of less than ten feet (Williams, 1979).

Maintenance of a stable water table level is of critical importance in this region because agriculture is extremely dependent on groundwater and pumping costs are directly dependent on the depth of the water table. Deeper water is more expensive to pump, and presently many local farmers are finding it increasingly difficult to farm profitably. In fact, several farms have recently been forced out of production (Daynes, 1987). The critical water resource issue in these three valleys is not the presence or absence of adequate water; rather, the critical water issue is economic because of the high costs associated with using groundwater for agricultural production.

Fish Slough, located in southern Chalfant Valley, is a unique wetland that straddles the border of Mono and Inyo counties. Fish Slough is the last portion of the Owens Valley floor which remains relatively unaffected by man's influence. It provides critical habitat for the Owens Pupfish, federally listed as endangered. Fish Slough also provides protected habitat for three additional species of fish, unique to the Owens Valley. Fish Slough was identified as an Area of Critical Environmental Concern by the Bureau of Land Management (BLM), and a special management plan has been developed for the area (BLM, 1986). Although it has not been well documented, apparently there is a potential for groundwater pumping in the Chalfant Valley to affect adversely water levels in Fish Slough.

The Mono County MEA also discusses groundwater recharge in the Tri-Valley:

Benton/Hammil/Chalfant Valley Basin is a 250-square-mile basin drained by Fish Slough into the upper reaches of the Owens Valley. Surface water flow is southward from the Benton Valley to Hammil and then into Chalfant Valley. A water balance for Chalfant Valley shows a net water balance outflow from the Chalfant Valley of 13,700 acre-feet per year and a net water balance outflow from the Hammil and Benton Valleys of 5,900 acre-feet per year (Nolte and Associates, 1980); 91% of the water balance comes from run-off from the White Mountains east of the valley. This run-off is in small stream channels that are perennial at the higher elevations but are ephemeral on the lowest reaches and seldom flow to the center of the valley. All of this water infiltrates into the fill material and becomes recharge to the basin fills of the Hammil/Chalfant basin. The groundwater of this basin is the primary source of supply to the wetlands of Fish Slough.

The Water Well Feasibility and Siting Study presents the following conclusions:

Hydrogeologic Conditions

Subsurface geologic conditions are interpreted to include in stratigraphic order, as measured from below ground surface: valley fill deposits to a maximum depth of 30 ft bgs; alluvial fan deposits between the approximate depths of 30 ft to a minimum depth of 100 ft; and then possibly Bishop tuff and/or older alluvium. It should be noted that it may be difficult to distinguish alluvial fan deposits from older alluvium in the field via the geologic logging of drill cuttings generated from well drilling procedures.

The principal, potentially water-bearing earth materials for new on-site wells are considered to be the alluvial deposits and perhaps the underlying Bishop tuff and/or older alluvium. The overlying valley fill sediments are not considered to be a viable source of groundwater for the proposed project due to their lack of lateral extent and their limited thickness.

Groundwater within the alluvial fan deposits is expected to occur under water table (unconfined) conditions; this groundwater will exist within the pore spaces (voids) between the individual sand and gravel grains which comprise these deposits. Groundwater within the Bishop tuff, if encountered, is expected to occur under confined to semi-confined conditions, and principally within fractures and joints created in the rocks after they were deposited and formed. The amount of groundwater available to new wells in this tuff will depend principally on the size, number, frequency, openness, interconnection and lateral continuity of the fractures and joints encountered at the selected drill site.

Groundwater within the underlying older alluvium, if encountered, is expected to occur under confined conditions but within the pore spaces and voids created by grain to grain interaction of the sediments. Regional groundwater flow in the area of the Specific Plan area is likely to be in a south to southeasterly direction.

Water Levels

A recent May 2004 groundwater measurement by SGSI revealed a current static water level depth of approximately 49 ft bgs in the existing on-site agricultural well. Information on the depth of this well, its perforation intervals, pumping rates, and formations penetrated by the borehole was not available for this project. Additional water levels recently measured in off-site wells to the east and southwest of the subject property reveal current static water levels at depths on the order of 47 to 49 ft bgs.

A deficit in rainfall and recharge has been experienced in the region for approximately the last few years. A decline in the water levels in the Chalfant Valley may be partially attributed to the reduced amounts of annual rainfall during this period. It is likely that, in the event of a few years of more-normal or even surplus rain, water levels in the Chalfant Valley may increase, with groundwater extraction continuing at the same rate it is today, or even a higher rate than it is today.

Existing Water Wells

Two water wells exist on the residential portion of the Specific Plan area, an agricultural well and a domestic well; no data exist to document the construction of either well. Numerous privately-owned, domestic-supply water wells exist on off-site properties that have been developed in areas located to the east, north and southwest of the subject property, although the greatest concentration of these off-site wells is to the east and to the south. The depths, pumping rates, static (non-pumping) and pumping water levels, and water quality of most these proximal off-site wells are unknown and even if the data had been monitored or recorded previously by others, such data would be considered confidential by Mono County and the California DWR.

However, driller's logs for twelve of the nearby wells were collect by Workforce and subsequently reviewed by RCS geologists. Key data for these wells include:

a. Five wells were constructed in the 1980s, four in the 1990s, and three in 2003.
b. Well depths varied as follows: one well is 95 ft deep, six wells extend to depths between 100 ft bgs and 160 ft bgs; and five wells extend to depths of 160 ft bgs and 220 ft bgs.

c. Cement sanitary seals range from 20 ft to 36 ft, in depth; 10 of the 12 wells have seals ranging from 20 ft to 25 ft. A cement sanitary seal depth of at least 50 ft is required for community-supply water wells.
d. The depth of the top of the Bishop tuff in the Specific Plan area appears to increase from west to east and from south to north. It also appears that the thickness of the tuff decreases in an easterly direction across the valley.
e. The two of the 12 reviewed wells that lie east of Hwy. 6 do not penetrate the Bishop tuff; they are likely perforated with the "Qa" type alluvium.

Proposed Specific Plan Usage

Reportedly, 48 single-family dwelling units and a separate 2-acre commercial parcel are proposed for the 29-acre Specific Plan area. The annual residential usage is estimated to total 48 AF/yr, (exclusive of fire flow requirements) for the dwelling units within the residential subdivision portion of the Specific Plan area; this represents an average use of about 1 AF/yr for each of the 48 dwelling units. Lots A, D, and E, also located with the residential portion of the Specific Plan area, will require a maximum of 3 AF/yr of groundwater for landscaping purposes. Because the types of businesses that may occupy the commercial parcel are unknown, a conservative maximum estimate of 5 AF/yr is assumed for the total water demand on the commercial parcel. The sum of the water usage for the residential subdivision (including lots A, D, and E) and the commercial parcel yields a total estimated water demand for the Specific Plan area of 56 AF/yr. The 51 AF/yr residential subdivision demand is to be met by pumping groundwater from new on-site water wells. To provide the required volume of 51 AF each year will require new on-site wells to produce groundwater at a total combined pumping rate of 32 gpm, assuming the wells all pump continuously, 100% of the time each year. On a more realistic operational pumping basis of 8 hours per day (33% of the time), then the total combined pumping capacity of the new wells would need to be only about 96 gpm for the residential subdivision usage.

Because the new wells would be considered to be community-supply water wells, the County would require that the groundwater flow from the residential water system to be capable of meeting the instantaneous fire flow requirement of 750 gpm for a sustained pumping period of two hours. In addition, the proposed water system would also need to provide the peak residential usage flow for two hours during a fire event, which is calculated to be 64 gpm (double the annual residential usage, per Triad).

These requirements together equal a maximum water system flow requirement of 814 gpm. Based on the operational pumping rate of the proposed wells, Workforce and Triad propose to construct an appropriate amount of on-site, subsurface water storage, capable of providing this necessary maximum water flow.

Groundwater in Storage

Based on recently measured static water levels in the general vicinity of the Specific Plan area, and estimates of the thickness of the water-bearing alluvium and its specific yield, approximately 580 AF to 725 AF of groundwater is calculated to currently exist in storage directly beneath the subject property. The anticipated annual groundwater demand of the Specific Plan area (56 AF) represents only 8% to 10% of the groundwater that is currently in storage beneath the property and that is available to new on-site wells.

Because of these values, and based on the known lateral separation between the two proposed on-site wells and known existing off-site wells owned by others, and also on the anticipated pumping durations for the new wells, it is our opinion that there will be no significant water level drawdown impacts on those off-site wells. To better define the actual amounts, if any, of the possible drawdown

impacts on off-site wells that may be caused by pumping of the new on-site wells, a maximum 72-hour pumping test can be designed and conducted in the first new on-site well.

Water Well Feasibility and Recommended Well Sites

It is considered hydrogeologically feasible to drill and construct at least two new, community-supply water wells on the residential portion of the Specific Plan area. Problems associated with the development of the on-site groundwater resources include:

a. Two new wells are proposed to meet the 51 AF/yr demand of the proposed residential development (including lots A, D, and E). Although after construction and testing of a well, it may be feasible to meet this demand with a single water well, two wells are especially necessary to permit a supplemental and/or emergency supply when one of the wells/pumps is undergoing routine rehabilitation or during an emergency such as a pump failure.
b. Individual domestic-supply wells owned by others exist to the east, north and southwest of the site; hence, the final siting, design and construction of the two new on-site wells must consider the proximity of these off-site wells.
c. Each of the proposed on-site residential units and each off-site residence will have or has its own private subsurface disposal system. It will be important that the siting, final design, and construction of each new well meet the County-promulgated minimum separation distances between each new well and proposed/existing leachfields. It will also be important to construct each new well with a minimum 50-foot deep sanitary cement seal.

Figure 8, "Recommended Well Location Map," shows the two recommended well site locations, in priority order, for new on-site Well A and B; drill sites were selected on the basis of hydrogeological and logistical issues. Well Site A should be drilled, constructed and tested first, prior to proceeding with similar work at Site B. If either or both sites do not produce groundwater of sufficient quantity and of acceptable quality, then additional locations and/or drilling depths can readily be generated, with these alternative locations being determined on the basis of the in-situ results derived at these two initial locations.

As shown on Figure 8, the locations for the two recommended well sites are as follows:

a. Well Site A: on the western edge of proposed lot 31. The nearest off-site well is likely approximately 1000 ft to 1100 ft to the south.
b. Well Site B: on the southwestern/northwestern corner shared by proposed lots 7 and 8. The nearest off-site well likely lies approximately 550 ft to the north. Also, note that it is recommended that the new well be constructed a minimum of 30 ft from the existing agricultural well. Special well destruction methods for the existing agricultural well are provided in Item No. 3, above. A yellow-colored circle with a scaled-radius of 100 ft has been illustrated around each proposed well site. The radius of this circle is to illustrate the minimum separation that each well must be to meet the required 100-foot setback from possible leachfields, as set forth by the Lahontan Regional Water Quality Control Board.

   Also shown on Figure 8 is the site of the proposed water tanks, surrounded by a blue circle with an approximate scaled-radius of 150 feet. The radius of this circle represents the minimum distance that the proposed subsurface water tanks must be from any of the possible leachfields, as set forth by the Lahontan Regional Water Quality Control Board. It should be noted that because of setback requirements (as illustrated on Figure 8), the area available for a leachfield is significantly reduced for proposed lots 7, 8, and 31, and somewhat reduced for the commercial parcel and for lots 23, 24, 25, and 32.

Water Quality

On June 1, 2004, Mr. Dougherty collected a groundwater sample from the on-site agricultural well (see Figure 1). Great Basin Laboratories, Inc. received the sample and analyzed it for selected constituents. Limited water quality data derived from that laboratory are summarized below:

1. Dissolved metals were analyzed, and resulted in concentrations below the State Maximum Contamination Levels (MCL) for each constituent in the sampled wells. Metals analyzed include: antimony arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, titanium, vanadium, and zinc. From the laboratory test results, the laboratory reported results as "less than" a particular concentration for each metal, as opposed to the actual concentration encountered in the groundwater sample.
2. Concentrations of both iron and manganese were reported by the laboratory to be less than 0.05 parts per million (ppm) in the sample; 1 ppm is equivalent to 1 milligram per liter (mg/l). Therefore, the concentrations of both iron and manganese are less than the State secondary Maximum Contaminant Level (MCL) for each constituent; these secondary MCLs are 0.3 ppm and 0.05 ppm, respectively.
3. Nitrate as Nitrogen (NO3-N) was reported at a concentration of 0.6 ppm in the groundwater sample, much lower than the State MCL of 10 ppm for this constituent.
4. Total dissolved solids (TDS) was reported at a concentration of 216 ppm, below the State secondary MCL range of 500 ppm to 1,000 ppm for TDS. From the limited water quality data, it appears that the laboratory TDS value was calculated using a ratio between the laboratory electrical conductivity (EC) value and the TDS.
5. A pH of 7.11 was reported for the sample.

Subsequent review of the Water Well Feasibility and Siting Study by AMEC Earth and Environmental, Inc., resulted in the following comments:

1. The report states that the property was previously used for agricultural purposes and an on-site irrigation well is still present. Typical water demands for commonly grown crops in the area, such as alfalfa are on the order of 4-6 acre-feet per acre. If 20 acres of the 29 acres were previously utilized for agriculture purposes the past water demand probably would have ranged from 80 to 120 acre-feet per year. Given this previous demand, it is considered possible that an assessment of past land use, including local changes in demographics and past legal filings for water use may aid in supporting the premise that the local aquifer can support the proposed development.
2. Statements in the report indicate that the work performed specifically excludes an assessment of impacts due to proposed septic systems. The report should contain an assessment of the amount of recharge to the aquifer due to return flows from the septic systems. In additional, studies performed by the U.S. Geological Survey and others, such as Washoe County, Nevada, have demonstrated that densely spaced septic systems overlying a shallow unconfined aquifer (as described for this proposed project) can lead to significant contamination of the aquifer and future costly modifications to the water and wastewater systems. This latter point is made so that the issue can be addressed by Mono County in the future, if desired.
3. A primary argument made for the feasibility of the aquifer to sustain the proposed development is the overall state of the aquifer with respect to recharge verses discharge. AMEC agrees that this is a very important issue for both this proposed development and future developments in the Chalfant Valley. However, the area of influence of a water well and the amount of draw-down observed in the aquifer surrounding the well (given a constant recharge) is related to the hydrological characteristics of the aquifer in the immediate vicinity of the well. The report states that minimal data relating to these characteristics in the vicinity of the aquifer was available. However, even with the lack of specific data the authors concluded, "There will be no

significant water level drawdown impacts on those offsite wells." It is suggested that the proposed drilling and testing of the aquifer be performed and that an assessment of the potential impacts to the offsite wells be provided to Mono County. The data from such a test program could be used to aid in assessing the potential impacts to the proposed water supply wells from septic recharge and the premise that the proposed separation distances of the two supply wells is adequate to address well interference.

4. A concluding statement is made to the effect that water in the Bishop Tuff, located below the unconfined alluvial aquifer, should be under semi-confined to confined conditions. Previous sections in the report indicate that the two lithologic units are in direct contact. An explanation of why there would then be two hydrologic regimes should be provided.
5. The California Department of Health Services requires that a permitted public water source be sustainable for a minimum of ten years. Please provide specific discussion relating to the resource, this requirement, and the potential impacts of discharging 56 acre-feet per year from the site for ten years.

WATER RESOURCES IMPACTS

Impacts to water resources in the project vicinity could include both water quality and quantity impacts to existing wells in the project vicinity and impacts to the aquifer underlying the project site.

The Water Well Feasibility and Siting Study concludes that "there will be no significant water level drawdown impacts on those off-site wells" and that there is sufficient water in the aquifer underlying the project site to meet the estimated demand for the project without significant impacts to the aquifer.

Review of the Water Well Feasibility and Siting Study by AMEC Earth and Environmental, Inc., concluded that the study should contain as assessment of the impact of the proposed septic systems on the underlying aquifer, both to study the amount of recharge to the aquifer from the return flows of the septic systems and the potential for contamination of the aquifer. AMEC suggests that insufficient data are currently available to determine that there will be no impact to offsite wells and suggests that the proposed drilling and testing of the aquifer be performed and the results used to aid in assessing potential impacts to offsite wells and to the aquifer. In addition, AMEC points out that the California Department of Health Services requires that a permitted public water source be sustainable for a minimum of ten years and requests that the water study provide a specific discussion relating to the resource, this requirement, and the potential impacts of discharging 56 acre-feet per year from the site for ten years.

CONCLUSION

Impacts to water resources could be significant; mitigation measures are required to reduce those impacts to a less-than-significant level. The proposed mitigation measures have been incorporated into the Specific Plan as standards and policies.

WATER RESOURCES MITIGATION

The following proposed mitigation measures mitigate the environmental impact(s) identified in the previous section:

WR-1 To ensure that the proposed water system avoids impacts to surrounding wells and to the surrounding environment (Mountain Vistas Specific Plan Policy 8-C) and to better define the actual amounts, if any, of the possible drawdown impacts on off-site wells that may be caused by pumping of the new on-site wells, a maximum 72-hour pumping test shall be designed and conducted in the first new on-site well. Off-site wells shall be monitored

during and after the pump test. The pump test data shall also be used to assess possible impacts to the aquifer. Following completion of the pump test, the engineer shall generate a cone of depression showing the distance at which wells could be affected by pumping at the project site. The pump test shall be completed and the data analyzed prior to approval of the Final Tract Map (Mountain Vistas Specific Plan Conservation Standard CS-34).

WR-2 Prior to approval of the Final Tract Map, the Water Well Feasibility and Siting Study shall be revised to include an assessment of the potential impact(s) of the septic systems on the underlying aquifer and to address the potential impacts of discharging 56 acre-feet from the site for 10 years (Mountain Vistas Specific Plan Conservation Standard CS-35).

WR-3 If the pump test or the revised Water Well Study indicates that there will be significant impacts to the underlying aquifer or to surrounding existing wells, either in the short-term or the long-term, the Final Tract Map shall not be approved until the project is revised (Mountain Vistas Specific Plan Conservation Standard CS-36).

WR-4 Landscaping installed by Workforce Homebuilders LLC shall comply with the Master Landscape Plan prepared for the Mountain Vistas Specific Plan. The landscape plan in the Draft Specific Plan and EIR is a conceptual plan. A final detailed landscape plan, prepared in accordance with Mono County's Landscape and Revegetation Requirements, shall be prepared and approved prior to approval of the Final Tract Map (Mountain Vistas Specific Plan Conservation Standard CS-37).

WR-5 Landscaping installed by the Workforce Homebuilders LLC shall be maintained and irrigated in accordance with the requirements specified on the Landscape Plan (Mountain Vistas Specific Plan Conservation Standard CS-38).

WR-6 Landscaping on individual residential lots shall be predominantly xeriscape (i.e., 65% of landscaping on an individual lot shall be xeriscape). The requirement for xeriscapic landscaping shall be reiterated in the CC&Rs for the project (Mountain Vistas Specific Plan Conservation Standard CS-39).

Xeriscape means a dry landscape or a landscape requiring low irrigation and low maintenance. Many of the plants may not require any irrigation once they are established; others may require only limited drip irrigation. Xeriscape landscaping incorporates several basic principles that lead to saving water:

- Soil preparation. Amending soil, particularly in areas for shrubs and flowers, will improve the soil's water-holding capacity and reduce water consumption.
- Plant selection. Selecting trees, shrubs and groundcovers based on their adaptability to a region's soil and climate will reduce irrigation and maintenance requirements.
- Efficient irrigation. The use of efficient irrigation methods, such as drip irrigation and timed watering systems, will also reduce water consumption.
- Mulch. Using mulch in flower and shrub beds and around the base of trees will prevent water loss from the soil through evaporation and increase water penetration during irrigation.
- Maintenance. Appropriate maintenance (pruning, weeding, fertilization, pest control, irrigation) increases the health of plants and decreases the need for water.

The following lists of plant species are intended as reference only. Xeriscape landscaping at Mountain Vistas is not limited to these plants. Some of these species, while appropriate for the Great Basin landscape at Reno, may not be so appropriate for

Chalfant due to the strong winds in Chalfant or other considerations. It is always wise to consult with local landscapers and nursery staff.

Shrubs Identified by the California Native Plant Society as Appropriate for Chalfant

Calystegia longipes	Bush morning glory
Ceanothus greggii v. vestita	Desert ceanothus
Ceanothus leucodermis	Chaparral whitethorn
Cercocarpus ledifolius	Mountain mahogany
Coleogyne ramosissima	Blackbrush
Encelia actonii	Bush sunflower
Ephedra nevadensis	Desert ephedra
Ericameria cooperi	Cooper's goldenbush
Ericameria teretifolia	Narrow leaf rabbitbrush
Eriogonum fasciculatum v. polifolium	California buckwheat
Eriogonum umbellatum v. nevadense	Sulphur buckwheat
Forestiera pubescens	Desert olive
Grayia spinosa	Spiny hopsage
Hymenoclea salsola	Desert pearl
Larrea tridentata	Creosote bush
Lupinus excubitus	Inyo bush lupine
Prunus andersonii	Desert peach
Psorothamnus arborescens	Indigo bush
Purshia tridentata	Bitterbrush
Rhamnus californica	Coffeeberry
Salvia dorrii	Purple sage
Stanleya pinnata	Prince's plume
Stanleya elata	Prince's plume
Xylorhiza tortifolia	Mojave aster

Additional Plants Identified as Appropriate for Great Basin Xeriscape Landscapes (specifically Reno, Nevada)

Tall Deciduous Shade Trees

Celtis occidentalis	Hackberry
Catalpa speciosa	Western Catalpa
Quercus macrocarpa	Burr Oak
Quercus robur	English Oak
Robinia pseudoacacia	Purple robe locust
Gleditsia triancanthos inermis	Thornless honeylocust

Evergreen Trees

Pinus edulis	Pinyon pine
Pinus monophyllia	Single leaf pinyon
Juniperus scopulorum	Juniper
Pinus jeffreyi	Jeffrey pine
Pinus nigra	Austrian pine
Pinus ponderosa	Ponderosa pine

Medium to Small Patio Trees

Robinia idahoensis	Idaho locust
Eleagnus angustifolia	Russian olive

Acer ginnala	Amur maple
Crataegus laevigata	"Paul's Scarlet" hawthorne
Koelreuteria paniculata	Golden rain tree
Malus sp.	Crabapple and apple

Evergreen Shrubs

Artemisia tridentata	Big sagebrush
Atriplex canescens	Four-wing saltbush
Chrysothamnus nauseosus	Rabbit brush
Cowania mexicana	Cliff rose
Ephedra viridis	Mormon tea
Purshia tridentata	Bitterbrush

Deciduous Shrubs

Cercocarpus montanus	Beech leaf mountain mahogany
Chamaebatiaria millefoliym	Fern bush
Fallugia paradoxa	Apache plume
Holodiscus dumosus	Mountain spray
Prunus andersonii	Desert peach
Rhus trilobata	Oakbush sumac

Ground Covers and Vines

Oenothera speciosa	Mexican primrose
Achillea tomentosa	Wooly yarrow
Dianthus deltoides	Maiden pinks
Hypericum sp.	St. John's wort
Juniperus sp.	Juniper (many)
Phlox subalata	Creeping phlox

WR-7 Water conserving fixtures shall be installed in all development on site, including all residential and commercial structures and irrigation systems. This requirement shall be reiterated in the CC&Rs for the project (Mountain Vistas Specific Plan Conservation Standard CS-40).

WATER RESOURCES MITIGATION MONITORING

See the mitigation monitoring plan.

HAZARDS

HAZARDS SETTING--FIRE

The project site is not within an area at risk from seismic hazards (MEA Figure F), rockfall or landslide hazards (MEA Figure 35C), or avalanche hazards (MEA Figure 37). It is located in an area identified as having a very high fire hazard (MEA, p. 304), as is most of Mono County.

HAZARDS IMPACTS--FIRE

The development of additional housing in an area with a high fire hazard could subject more people and property to that fire hazard. Design requirements for the project will mitigate the potential high fire hazard to a less-than-significant level. The project will have an on-site water system with sufficient fire flow to meet the fire flow requirements established by the State of

California and the Chalfant Valley Fire Protection District (FPD). The project proponents are required to provide a "will serve" letter from the Chalfant FPD. In addition, development is required to comply with current requirements of the Uniform Fire Code to ensure that structures are fire safe. Mono County also has Fire Safe Regulations (Chapter 22 of the Mono County Land Development Regulations) that address emergency access, signing and building numbering, water supply reserves for emergency fire use, and vegetation modification around structures.

HAZARDS SETTING--FLOOD

The project site is in an area subject to flash flooding and mudflows. Although the FEMA Flood Insurance Rate Maps (FIRM Panel 184, dated August 19, 1985) do not show the project site as being within the 100-year floodplain, floods of that magnitude have occurred in the Tri-Valley, largely as the result of intense summer rain storms and flash flooding from the surrounding mountains. A Base Flood Elevation Study prepared for the project site found the project site to be located within the 100-year floodplain. The watershed contributing to floods at the project site is located north of the project site and is 486 square miles in size. It is bounded to the west by the Benton Range and to the east by the White Mountains and extends north across the California/Nevada border. Flows from extreme events will flow as very wide shallow flows through Hammil Valley and Chalfant Valley due to the wide shallow nature of the valley floor and floodplain.

The Base Flood Elevation Study prepared for the project site notes that the most recent known flooding event was in 1989. In that event, flood levels of 3-6 inches were observed in some areas of Chalfant. Floodwaters were not identified at the Chalfant Mercantile across Hwy. 6 from the project site but were identified at the Chalfant Valley Fire Department building and at the Chalfant County Park, both located on the east side of Hwy. 6 to the south of the project site. The Base Flood Elevation Study notes that flood waters will flow east of the project site and the project site is actually part way up the "bluff" on the west side of Chalfant Valley. Floodwaters in the project area generally come from the north, west of Hwy. 6, and flow almost directly toward the site. Highway 6 somewhat contains the runoff allowing weir overflow east to the town of Chalfant.

The Flood Insurance Study (FIS) for Mono County, prepared by FEMA, contains the following information concerning the flood of 1989 in the Tri-Valley:

> The worst flood on record occurred on August 9 and 10, 1989, when precipitation amounts of 1.45 and 1.70 inches, respectively, resulted in tremendous flows down the alluvial fan slopes of the White Mountains. The ensuing mudflow traversed Spring Canyon Creek, causing damage to roads, agricultural land, and some structures. Crop damage was estimated at $1.5 million. The U.S. Natural Resource Conservation Service (formerly the Soil Conservation Service) office in Bishop reported receiving nine applications under the Emergency Conservation Program for damage to 1,365 acres of cultivated agricultural land in the Benton and Hammil Valley areas. The CALTRANS office in Bishop reported expenditures of approximately $150,000 to fix State highways. Damage to county roads was estimated at another $257,000, for which the County applied to the Office of Emergency Services for reimbursement under the State Natural Disaster Assistance Act Program. There were reports of 50 homes being damaged from mudflows as high as 18 inches, although no structures were washed away. Some residents and tourists were evacuated.

The Mono County Sheriff's Log for 8/9/89 also contains information on the 1989 flood in Tri-Valley:

> **Place**: Southern Mono County
> **Summary**: Flash floods closed Hwy. 120, Hwy. 6, and County Road at Benton Crossing. Major areas affected: Chalfant, Benton, Hammil Valley. County declared State of Emergency.

Economic Damage: 70 homes (50 homes, 20 mobile homes): $700,000 in water damage; Agriculture losses: $1.5 million, Elementary school: $25,000, Federal and system roads: $412,000, Public facilities: $5,000.
Total Economic Damage: Private Damage, $2,200,000; Public Damage, $417,000
Details: Wall of water moved down Hwy 6 at 20 mph near Benton.

MONO COUNTY FLOOD PLAIN REGULATIONS

The Mono County Land Development Regulations, Chapter 21, Development Standards--Flood Plain Regulations, establish "… special requirements and regulations to be applied to those areas of the county subject to inundation in order to prevent loss of life and property damage." In order to reduce flood losses, the Flood Plain Regulations include methods and provisions for:

A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
D. Controlling, filling grading, dredging, and other development which may increase flood damage; and
E. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.
(Section 21.050, Mono County Land Development Regulations)

The Flood Plain Regulations also contain standards for the development of subdivisions:

A. All preliminary subdivision and land division proposals shall identify the flood hazard area and the elevation of the base flood. This shall apply to those divisions greater than 50 lots or 5 acres, whichever is the lesser.
B. All final subdivision plans will provide the elevations of proposed structure(s) and pads. If the site is filled above the base flood, the final pad elevation shall be certified by a registered professional engineer or surveyor and provided to the Floodplain Administrator.
C. All subdivision proposals shall be consistent with the need to minimize flood damage.
D. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
E. All subdivisions shall provide adequate drainage to reduce exposure to flood hazards.
(Section 21.180, Mono County Land Development Regulations)

The Mono County General Plan Safety Element also addresses development in flood hazard areas:

OBJECTIVE A

Regulate development in flood hazard areas in a manner that protects people and property from unreasonable risks of damage due to flooding.

Policy 1: Regulate the placement of new structures in the 100-year flood plain.
Action 1.1: Work with the Federal Emergency Management Agency, the State Department of Water Resources, and other appropriate agencies to update flood hazard studies for developing areas of the county. The June Lake, Walker-Coleville-Topaz, and Tri-Valley areas should be study priorities.
Action 1.5: Limit the intensity of development within the 100-year floodplain in the Land Use Element.

HAZARDS IMPACTS--FLOODING

The project site is located in an area subject to flooding. Since there are no existing technical data on flooding for the area, the 100-year flood was estimated using commonly accepted methods. The estimate of the 100-year peak discharge flood was then utilized to estimate water surface elevations at each lot in the proposed subdivision.

The 100-year peak discharge analysis was prepared by WRC Nevada, Inc., using reasonable and conservative estimates. That analysis was initially prepared for a 15-lot subdivision at 372 Chalfant Road, less than ¼ mile west of the project site. The hydrologic calculations prepared by WRC Nevada, Inc., are included in Appendix E of the Base Flood Elevation Study for the project (see Technical Studies in Appendix B of this DEIR). The 100-year peak discharge was determined to be 10,000 cubic feet per second (cfs).

The runoff flow of 10,000 cfs was utilized by Triad/Holmes Associates to determine Base Flood Elevations for the project site. The project was investigated both in the field and on available maps such as FEMA and QUAD maps.

The project is located on a very flat site with an average slope through the project site of 0.004 feet per foot. The direction of flow for smaller floods could vary significantly due to the flatness of the area; the calculations prepared by Triad/Homes are based on diverting a maximum of flow to the project site. Site surveys indicated that flood level waters generally come from the north, west of Hwy. 6, and flow almost directly toward the site. Hwy. 6 will somewhat contain the runoff allowing weir overflow east to the town of Chalfant. North-south Chalfant Road acts as a weir for flood flows to the east while the natural channel north of east-west Chalfant Road and west of the project site may carry some of the flow to the east. The hydrologic analysis prepared by WRC Nevada, Inc., notes that:

> Channel migration in these sandy soils in the project area is likely during extreme events and the erodible soils will be subject to local scour around the corners of building pads where localized velocities increases are likely due to contractions caused by the encroachment represented by an elevated fill pad in the flow path.

Triad/Holmes concluded that a flood with an intensity of 10,000 cfs would create a maximum depth of 2.58 feet over the channel elevation which would create a base flood over the affected portion of the property of as much as 2 feet. Homes should be built above the base flood elevation set by the study.

The Base Flood Elevation Study also concluded that:

> "The development of homes on the subject property would not have a significant effect on a flood event. Roads will be built to reduce impact of the installation of homes, essentially adding flow areas for floodwaters. Given the large size of the area, the very low velocities, and in comparison the small size of homes, installation of homes on this site will have minimal effect on upstream or downstream flooding in the subject area. It is advised that driveways and roads be constructed essentially at grade, or above grade by a maximum of 1 foot, so as not to significantly obstruct the flow of a storm."

The information contained in the amended Base Flood Elevation Study has been reviewed by the Mono County Floodplain Administrator and determined to be acceptable. The County's Floodplain

Ordinance requires the preliminary data in that study to be verified with additional detailed engineering studies before the final tract map is approved; that requirement has been incorporated into the mitigation measures for the project. Recommended mitigation measures in the Base Flood Elevation Study have been incorporated into the Conservation Standards for the Mountain Vistas Specific Plan. In compliance with the Mono County Floodplain Ordinance, those mitigation measures minimize flooding impacts to the housing on-site; they will not reduce other impacts resulting from flooding.

Flooding on site could result in damage to streets, to people caught outside, to property on the streets or stored outside. Flooding on site could also potentially create off-site impacts if the streets on site channeled the flood flow. These impacts are considered to be significant, unavoidable impacts of the project.

CONCLUSION

Potentially significant impacts will be present with regard to fire hazards; mitigation measures are required to reduce impacts to a less-than-significant level. Potentially significant unavoidable impacts will be present with regard to flooding hazards; mitigation measures are required to reduce impacts to the lowest feasible levels. The proposed mitigation measures have been incorporated into the Specific Plan as standards and policies.

HAZARDS MITIGATION

The following proposed mitigation measures mitigate the environmental impact(s) identified in the previous section:

H-1 The project shall comply with all requirements of the Chalfant Valley FPD and shall obtain a will serve letter from the FPD prior to approval of the Final Tract Map (Mountain Vistas Specific Plan Conservation Standard CS-30).

H-2 Development shall comply with the requirements of the Mono County Flood Plain Regulations, Chapter 21 of the Mono County Land Development Regulations, pertaining to the placement of structures within areas with flood hazards (Mountain Vistas Specific Plan Conservation Standard CS-31).

H-3 Development shall comply with the recommendations contained in the Base Flood Elevation Study prepared for the project; i.e.,

a. Construct homes such that finished floor elevations are above the base flood elevations indicated on Figure A1 in the Base Flood Elevation Study for the project (see Appendices).
b. Homes shall be built to conform fully to FEMA requirements for homes in flood areas, including, but not limited to, the installation of required ventilation for the home's crawl space. This shall be reiterated in the CC&Rs for the project.
c. Lot grading shall be kept to a minimum (i.e. that necessary for driveways and the building pad) so as not to significantly obstruct the flow of storm waters. Driveways and roads shall be constructed essentially at grade and shall not be constructed to obstruct the flow of a storm. This shall be reiterated in the CC &Rs for the project.
d. Homes for the north lots shall be built generally toward the road, to minimize the potential effect on upstream properties. Lots 1-4 shall require either further specific study or very specific building envelopes to minimize the potential effect on upstream properties.
e. As much as is practicable, homes built in a row perpendicular to the flood flow path shall be minimized.

f. Homes shall be built to minimize channeling away from the overflow weir created at Chalfant Road.

g. Building pads shall be protected against erosion particularly around the corners.

In order to comply with the above requirements, the Final Tract Map for the project shall indicate building envelopes for each site and shall indicate the base flood elevation applicable to each building envelope (Mountain Vistas Specific Plan Conservation Standard CS-32).

HAZARDS MITIGATION MONITORING

See the mitigation monitoring plan.

IV. PROJECT ALTERNATIVES

INTRODUCTION

> "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason." CEQA Guidelines Section 15126.6

The CEQA Guidelines require the discussion of alternatives to a proposed project. The Guidelines specifically require the analysis of a No Project Alternative (i.e., the project does not occur) and one or more development alternatives. The development alternatives must be "reasonable" ones which "… could feasibly attain most of the basic objectives of the project… An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation" (CEQA Guidelines Section 15126.6).

The alternatives analysis focuses on alternatives that are capable of avoiding or substantially lessening significant effects of the project, even if the project objectives are impeded to some degree or are most costly. The objective of the Mountain Vistas Specific Plan is to increase the amount of single-family housing in Mono County, specifically in Chalfant in the Tri-Valley, and to provide additional sites for small-scale commercial uses to serve the community.

The DEIR identifies two potentially significant unavoidable environmental effects of the project that cannot be reduced to a less-than-significant level; mitigation measures proposed in the DEIR will reduce these impacts to the lowest feasible levels.

1. Visual Resources; and
2. Hazards—flooding.

The DEIR identifies seven potentially significant environmental effects of the project that, with mitigation, can be reduced to less-than-significant levels.

1. Public Service Impacts (schools, police, fire, emergency medical services, recreation);
2. Geology/Soils Impacts;
3. Circulation Impacts (turn volume increases and safety concerns);
4. Noise Impacts;
5. Air Quality Impacts;
6. Water Resource Impacts; and
7. Hazards—fire.

All other impact areas are not potentially significant; mitigation measures are proposed in the DEIR for several of these impact areas to reduce impacts to even lower levels.

A. NO PROJECT ALTERNATIVE

In this alternative, no development would occur on the project site; it would remain in its present state. The No Project Alternative would have the following effects in comparison to the proposed project:

- It would eliminate unavoidable impacts on visual resources;
- It would eliminate unavoidable impacts on persons and property from flooding;
- It would eliminate additional impacts to public services in the area (schools, police, fire, emergency medical services, recreation);
- Dust erosion impacts to soils and air quality would remain as they currently are;
- Circulation impacts on Hwy. 6 would not occur;
- Traffic noise impacts on the additional proposed housing would not occur;
- It would eliminate impacts to water quality and quantity resulting from the proposed development; and
- Fire hazards to the additional proposed housing would not occur.

This alternative avoids all unavoidable and potentially significant impacts of the project but it does not meet the project objectives.

B. REDUCED DEVELOPMENT, 26 ONE-ACRE LOTS

In this alternative, twenty-six (26) single-family residences would be developed on one-acre lots; there would be no commercial development (see Figure 10). The Equestrian Overlay (E) land use designation would be applied to appropriate lots on the western side of the development. This alternative would include the windbreak and the pedestrian path included in the proposed project as well as a stormwater retention area. This alternative would not require a General Plan Amendment since it would meet the one-acre minimum lot size requirement for the existing Estate Residential (ER) land use designation for the parcel. It would also be consistent with the policy in the Mono County Land Use Element that requires gross densities for residential development in Chalfant to not exceed one dwelling unit per acre.

This alternative would have the following effects in comparison to the proposed project:

- The visual impacts would be reduced but would still be unavoidable since any development on the parcel would create unavoidable visual impacts due to the very open nature of the parcel and the long sightlines in the area;
- This alternative would still result in unavoidable impacts to persons and property from flooding but fewer people would be impacted;
- This alternative would result in additional impacts to public services in the area (schools, police, fire, emergency medical services, recreation) but those impacts would be less

significant since there would be approximately 46% fewer people with this alternative (66 people vs. 120);

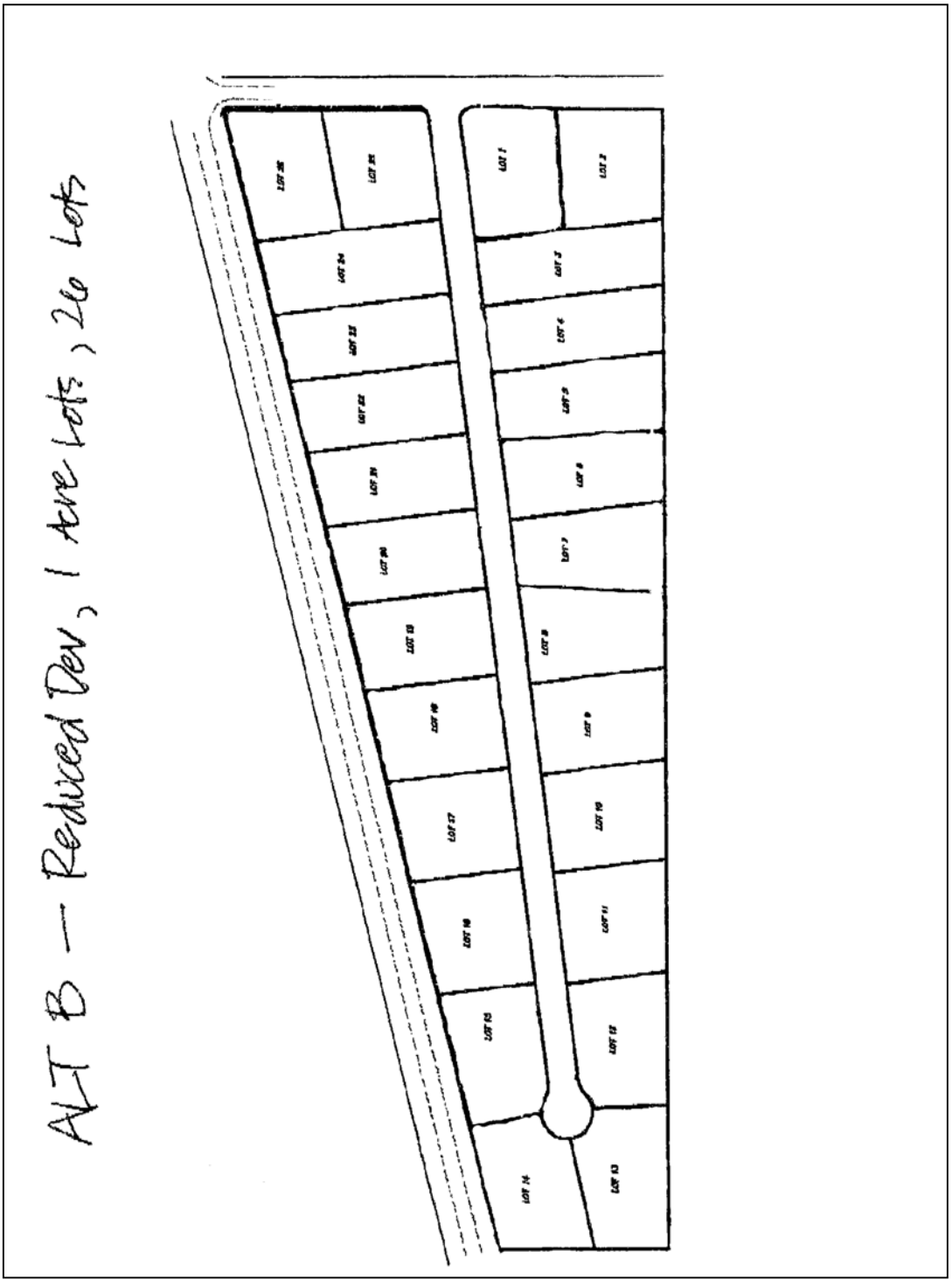


FIGURE 10:
ALTERNATIVE B REDUCED DEVELOPMENT, 26 ONE-ACRE LOTS

- Circulation impacts on Hwy. 6 would be reduced since there would be approximately 46% fewer houses and people with this alternative (26 houses vs. 47, 66 people vs. 120);
- Dust erosion impacts to soils and air quality could potentially be reduced somewhat since less land would be disturbed for roads and housing;
- Traffic noise impacts to the additional housing developed on the project site could potentially be reduced somewhat since housing could be set back further from Hwy. 6;
- This alternative would reduce impacts to water quality and quantity since 46% fewer houses would be developed (26 houses vs. 47);
- This alternative would still result in fire hazards to the proposed housing but fewer units would be affected; and
- Impacts to other resources that were not identified as potentially significant would also be reduced since the development would be smaller in size.

This alternative would meet the project objective of providing additional single-family residential housing although there would not be as much housing and the housing might be more expensive. It would still meet the entire need for above moderate housing in the Tri-Valley identified in the Housing Element. It would not meet the project objective of providing additional commercial space.

C. REDUCED DEVELOPMENT, 18 ONE-ACRE LOTS

In this alternative, eighteen (18) single-family residences would be developed on one-acre lots; there would be no commercial development (see Figure 11). The Equestrian Overlay (E) land use designation would be applied to appropriate lots on the western side of the development. The majority of the lots would be located along the western side of the parcel; the remaining five lots would be located in the middle southern portion of the lot. . This alternative would include the windbreak and the pedestrian path included in the proposed project. The undeveloped portion of the parcel parallel to Hwy. 6 would be developed as a stormwater retention area and landscaped open space area.

This alternative would not require a General Plan Amendment since it would meet the one-acre minimum lot size requirement for the existing Estate Residential (ER) land use designation for the parcel. It would also be consistent with the policy in the Mono County Land Use Element that requires gross densities for residential development in Chalfant to not exceed one dwelling unit per acre.

This alternative would have the following effects in comparison to the proposed project:

- The visual impacts would be reduced but would still be unavoidable since any development on the parcel would create unavoidable visual impacts due to the very open nature of the parcel and the long sightlines in the area;
- This alternative would still result in unavoidable impacts to persons and property from flooding but fewer people would be impacted;
- This alternative would result in additional impacts to public services in the area (schools, police, fire, emergency medical services, recreation) but those impacts would be less significant since there would be approximately 62% fewer people with this alternative (46 people vs. 120);

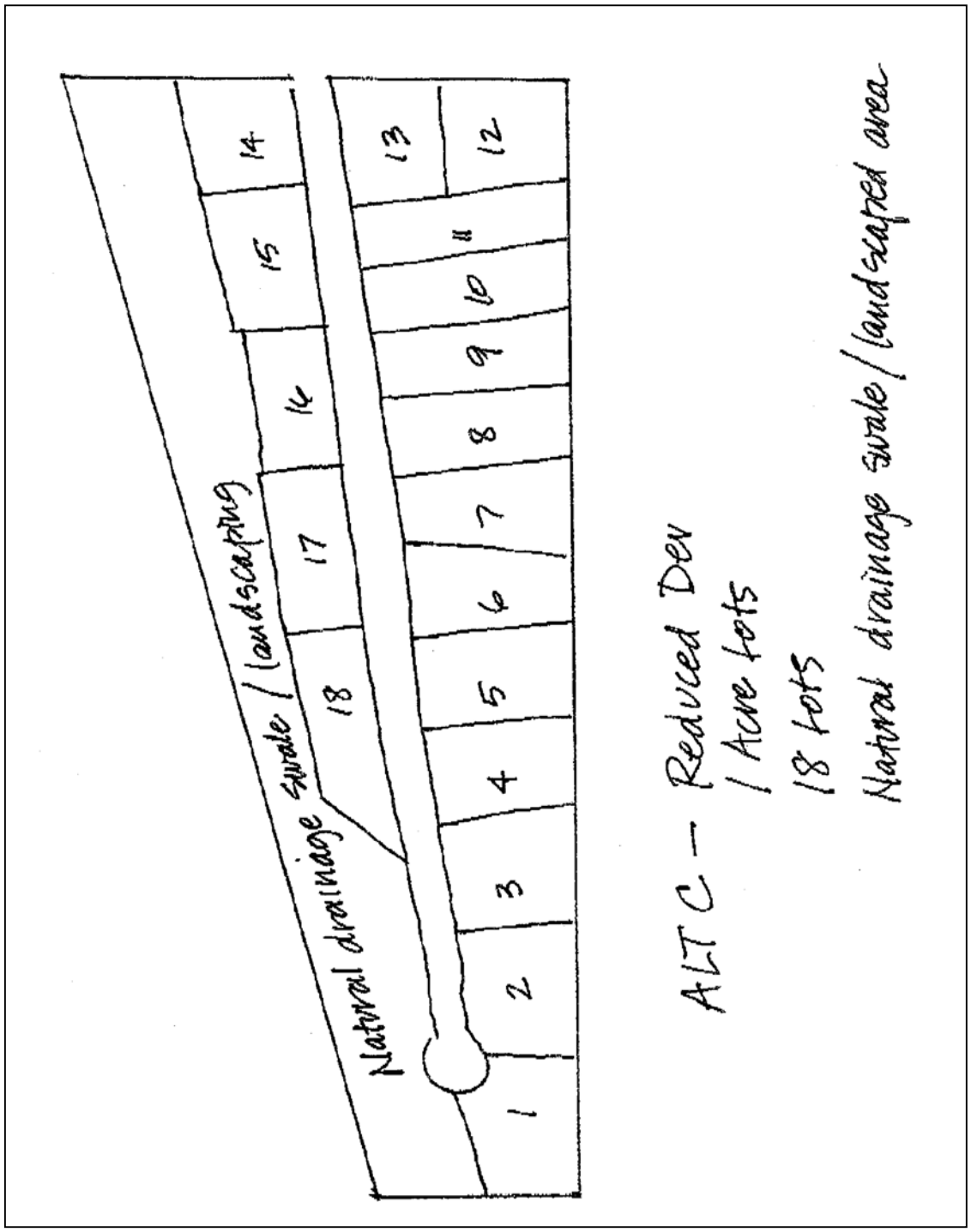


FIGURE 11:
ALTERNATIVE C -- REDUCED DEVELOPMENT, 18 ONE-ACRE LOTS

- Circulation impacts on Hwy. 6 would be reduced since there would be approximately 62% fewer houses and people with this alternative (18 houses vs. 47, 46 people vs. 120);
- Dust erosion impacts to soils and air quality could potentially be reduced somewhat since less land would be disturbed for roads and housing;
- Traffic noise impacts to the additional housing developed on the project site could potentially be reduced somewhat since housing could be set back further from Hwy. 6 and the portion of the site affected by traffic noise from Hwy. 6 would remain undeveloped;
- This alternative would reduce impacts to water quality and quantity since 62% fewer houses would be developed (18 houses vs. 47);
- This alternative would still result in fire hazards to the proposed housing but fewer units would be affected; and
- Impacts to other resources that were not identified as potentially significant would also be reduced since the development would be smaller in size.

This alternative would meet the project objective of providing additional single-family residential housing although there would not be as much housing and the housing might be more expensive. It would still meet the entire need for above moderate housing in the Tri-Valley identified in the Housing Element. It would not meet the project objective of providing additional commercial space.

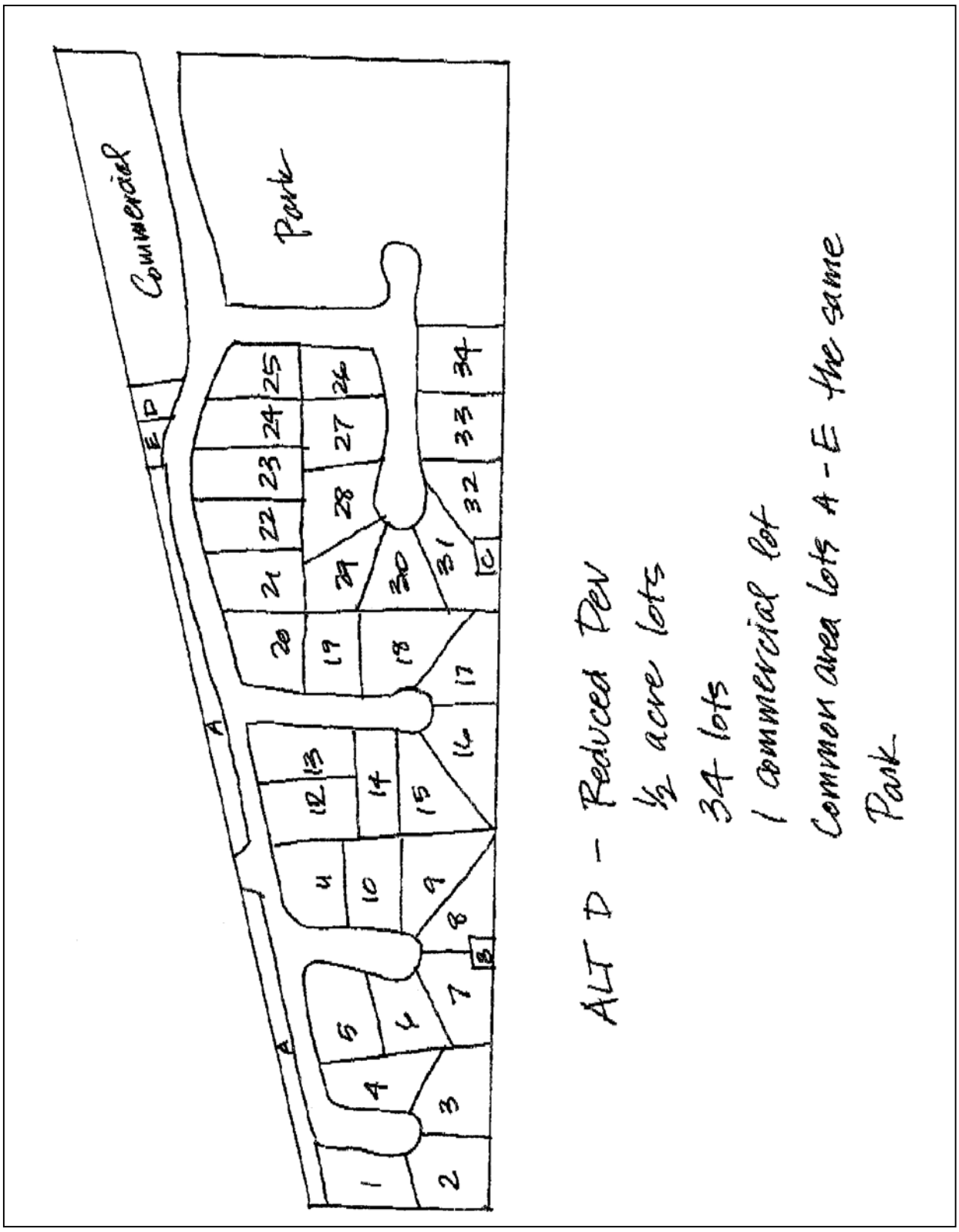
D. REDUCED DEVELOPMENT, 34 HALF-ACRE LOTS

This alternative would include thirty-four (34) single-family residences on half-acre lots, the proposed commercial lot, and a park area (see Figure 12). The housing would be in the same configuration as the proposed project but Lots 35-48 in the southwest corner of the parcel along Chalfant Road would be eliminated and replaced by a park. This alternative would include the windbreak and the pedestrian path included in the proposed project as well as a stormwater retention area located on a portion of the park site.

This alternative would provide additional park space in Chalfant and would be consistent with Mono County General Plan policies that " Require new large-scale development to allocate sufficient land and facilities to meet the recreational needs of residents of the development" (Mono County Land Use Element, Tri-Valley policies, Objective E, Action 2.2). It would not be consistent with General Plan policies on densities in Chalfant that state "Gross densities for residential development in Chalfant shall not exceed one (1) dwelling unit per acre. For parcels ten (10) acres or greater, clustering shall be encouraged" (Mono County Land Use Element, Tri-Valley policies, Objective B, Action 2.1).

This alternative would have the following effects in comparison to the proposed project:

- The visual impacts would be reduced somewhat but would still be unavoidable since any development on the parcel would create unavoidable visual impacts due to the very open nature of the parcel and the long sightlines in the area;
- This alternative would result in unavoidable impacts to persons and property from flooding. More people could potentially be affected if flooding occurred when people were using the park;


Commercial
Park
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34
ALT D - Reduced Dev
½ acre lots
34 lots
1 commercial lot
Common area lots A - E the same
Park

FIGURE 12:

ALTERNATIVE D -- REDUCED DEVELOPMENT, 34 HALF-ACRE LOTS

- This alternative would result in additional impacts to public services in the area (schools, police, fire, emergency medical services, recreation) but those impacts would be less significant since there would be approximately 14% fewer people with this alternative (86 people vs. 120);
- Circulation impacts on Hwy. 6 could increase. There would be approximately 14% fewer houses and people with this alternative (34 houses vs. 47, 86 people vs. 120); traffic generated by the housing on site would be less. However, traffic generated by the park could increase overall circulation impacts on Hwy. 6, depending on what type of facilities were available at the park;
- Dust erosion impacts to soils and air quality would probably remain similar to those for the proposed project. Less land would be disturbed for roads and housing but land would be disturbed for the park and its associated parking;
- Traffic noise impacts to the additional housing developed on the project site would remain similar to those for the proposed project since the housing closest to Hwy. 6 would remain in the same location;
- Impacts to water quality and quantity would probably remain similar to those for the proposed project. Housing would be reduced but the park could use water depending on the facilities available there;
- This alternative would still result in fire hazards to the proposed housing but fewer units would be affected; and
- Some impacts to other resources that were not identified as potentially significant would also be reduced since the housing component of the development would be smaller in size while impacts to other resources that were not identified as potentially significant could increase (i.e. irrigation use at the park).

This alternative would meet the project objective of providing additional single-family residential housing although there would not be as much housing and the housing might be more expensive. It would still meet the entire need for above moderate housing in the Tri-Valley identified in the Housing Element. It would also meet the project objective of providing additional small-scale commercial space to serve the community.

E. CLUSTERED DEVELOPMENT, 48 LOTS

In this alternative, forty-eight (48) single-family residential lots would be clustered on approximately half the parcel (i.e. 48 lots on 14 acres, 0.29-acregross lot size, actual lot size approximately 0.25 acres or 10,890 square feet). The housing would be located on the southern half of the parcel (see Figure 13). One commercial lot would be located at the southeast corner of the parcel, adjacent to Hwy. 6 and Chalfant Road. A park would be located on the northern half of the parcel and an undeveloped strip parallel to Hwy. 6 would be utilized for stormwater retention and landscaping. The windbreaks and pedestrian path included in the proposed project would also be included in this project.

This alternative would provide additional park space in Chalfant and would be consistent with Mono County General Plan policies that "require new large-scale development to allocate sufficient land and facilities to meet the recreational needs of residents of the development"

(Mono County Land Use Element, Tri-Valley policies, Objective E, Action 2.2). It would not be consistent with General Plan policies on densities in Chalfant that state "Gross densities for residential development in Chalfant shall not exceed one (1) dwelling unit per acre. For parcels ten (10) acres or greater, clustering shall be encouraged" (Mono County Land Use Element, Tri-Valley policies, Objective B, Action 2.1). It would, however, be consistent with the requirement for clustering development.

This alternative would require a community sewer system due to the small lot size. A community sewer system would probably result in fewer environmental impacts overall than individual septic systems but might not be as economically feasible for the applicant and might raise the cost of the housing.

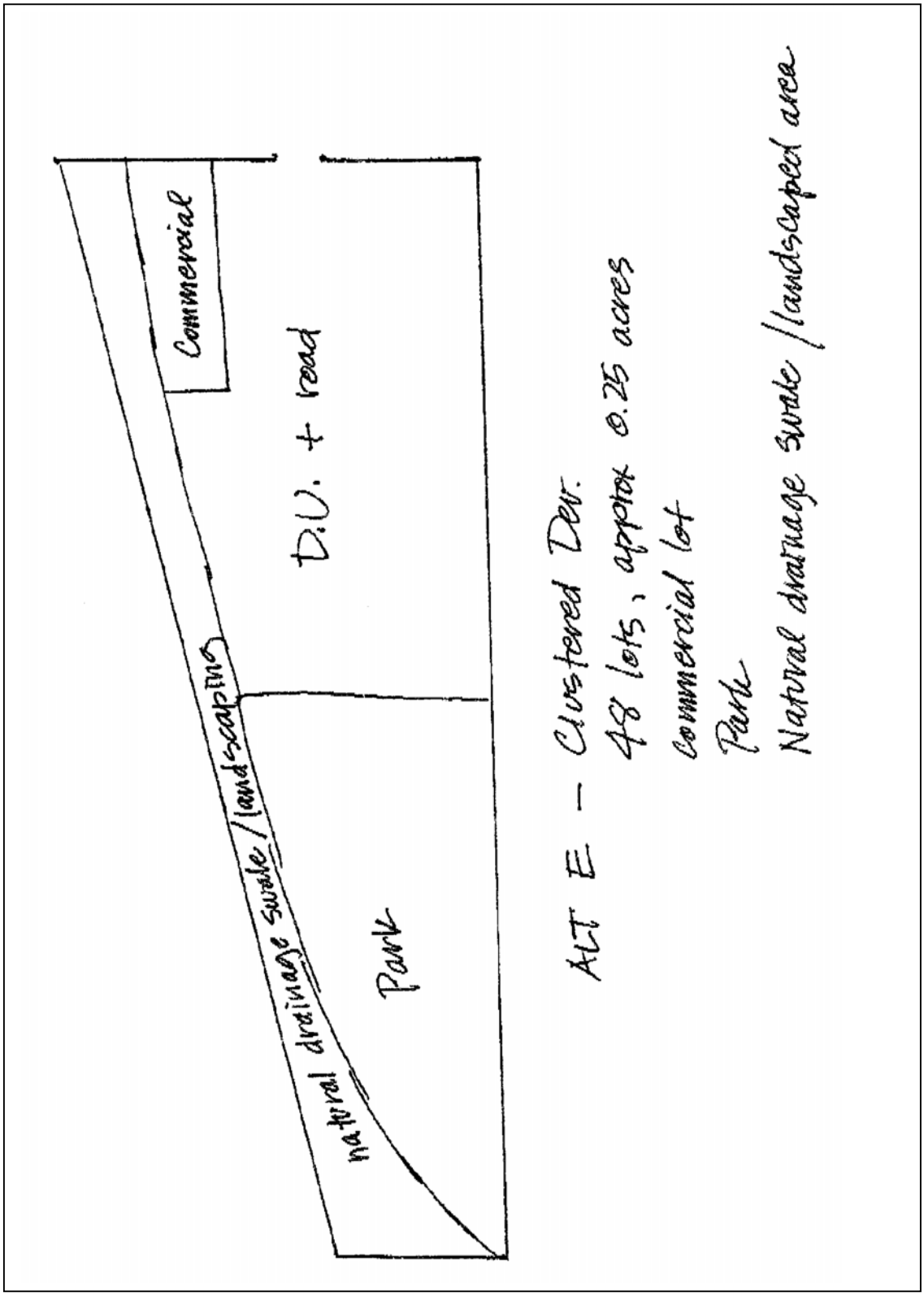

FIGURE 13:
ALTERNATIVE E -- CLUSTERED DEVELOPMENT, 48 LOTS

This alternative would have the following effects in comparison to the proposed project:

- The visual impacts would be reduced somewhat but would still be unavoidable since any development on the parcel would create unavoidable visual impacts due to the very open nature of the parcel and the long sightlines in the area;
- This alternative would result in unavoidable impacts to persons and property from flooding. More people could potentially be affected if flooding occurred when people were using the park;
- This alternative would result in similar impacts to public services in the area (schools, police, fire, emergency medical services, recreation) as the proposed project;
- Circulation impacts on Hwy. 6 could increase. There would be the same number of houses and people as for the proposed project. However, traffic generated by the park could increase overall circulation impacts on Hwy. 6, depending on what type of facilities were available at the park;
- Dust erosion impacts to soils and air quality would probably remain similar to those for the proposed project. . Housing would be clustered on a smaller area but land would be disturbed for the park and its associated parking;
- Traffic noise impacts to the housing developed on the project site could potentially be avoided since housing could be set back further from Hwy. 6 and the portion of the site impacted by traffic noise from Hwy. 6 would remain undeveloped or park space;
- Impacts to water quality and quantity would probably remain similar to those for the proposed project but the park could increase water use depending on the facilities available there;
- This alternative would still result in fire hazards to the proposed housing; and
- Some impacts to other resources that were not identified as potentially significant would also be reduced since the housing component of the development would be smaller in size while impacts to other resources that were not identified as potentially significant could increase (i.e., irrigation use at the park).

This would meet the project objectives of providing additional residential and commercial space and would meet concerns about additional park space.

F. ALTERNATIVE ACCESS

This alternative would provide forty-nine (49) single-family residential lots ranging in size from 0.31 acres to 0.61 acres, with most of the smaller lots being located in the southern half of the project site. The alternative would include a commercial lot at the southeast corner of the parcel, and a park and stormwater retention area adjacent to the commercial lot. The windbreaks and pedestrian path included in the proposed project would also be included in this project.

In this alternative, Chalfant Road would be abandoned from the intersection of Chalfant Road and Hwy. 6 west to the southwest corner of the project site. Chalfant Road would enter the project site at the southwest corner and follow a slight S-curve to intersect with Hwy. 6 at the Brown Subdivision Road intersection. This would eliminate one intersection from Hwy. 6, create a smoother traffic flow, and address safety concerns relating to intersections with Hwy. 6.

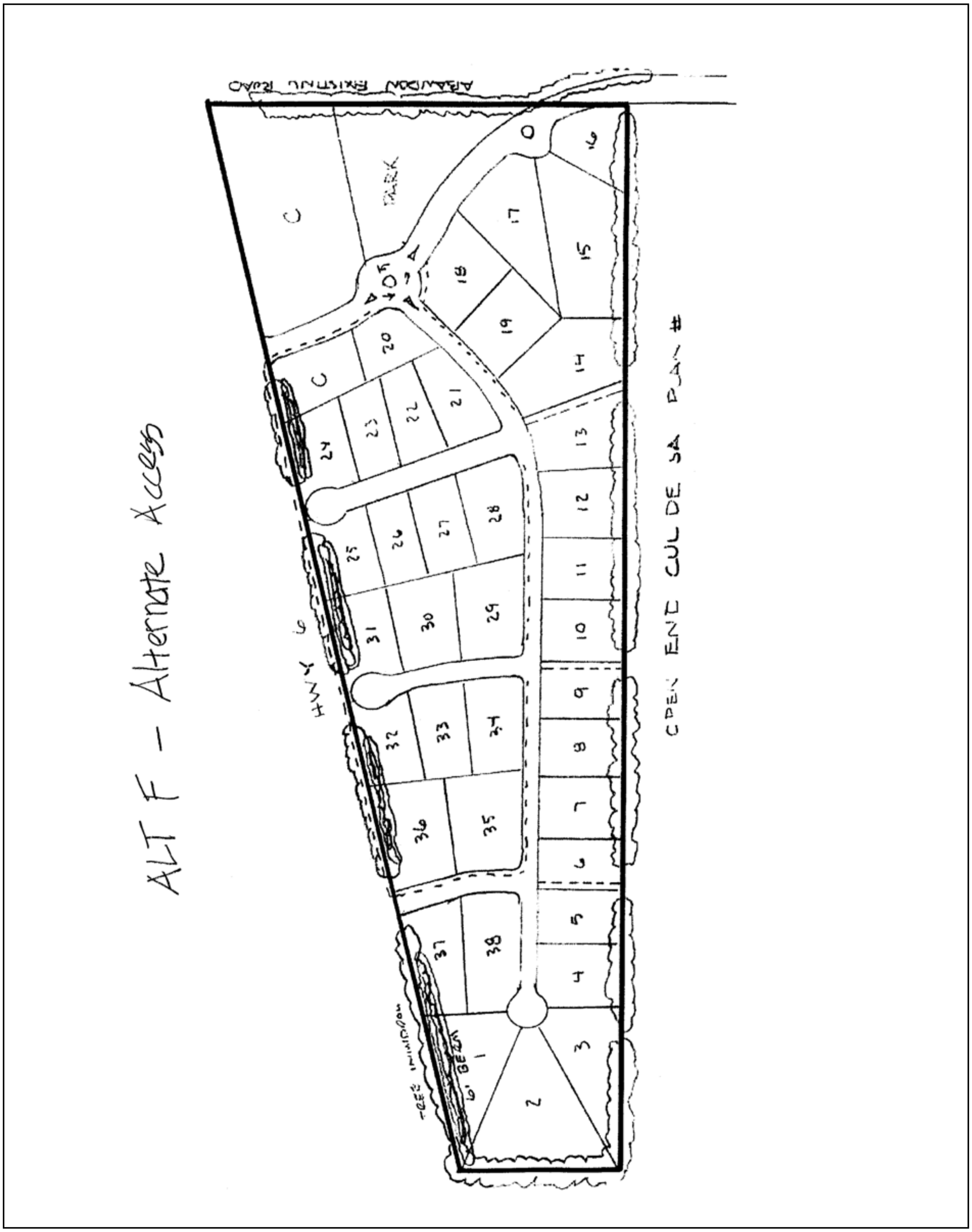

FIGURE 14:

ALTERNATIVE F -- ALTERNATIVE ACCESS

This alternative would provide additional park space in Chalfant and would be consistent with Mono County General Plan policies that " Require new large-scale development to allocate sufficient land and facilities to meet the recreational needs of residents of the development" (Mono County Land Use Element, Tri-Valley policies, Objective E, Action 2.2). It would not be consistent with General Plan policies on densities in Chalfant that state "Gross densities for residential development in Chalfant shall not exceed one (1) dwelling unit per acre. For parcels ten (10) acres or greater, clustering shall be encouraged" (Mono County Land Use Element, Tri-Valley policies, Objective B, Action 2.1). It would, however, be consistent with the requirement for clustering development.

This alternative would require a community sewer system due to the small lot sizes. A community sewer system would probably result in fewer environmental impacts overall than individual septic systems but might not be as economically feasible for the applicant and might raise the cost of the housing.

This alternative would have the following effects in comparison to the proposed project:

- The visual impacts would be reduced somewhat but would still be unavoidable since any development on the parcel would create unavoidable visual impacts due to the very open nature of the parcel and the long sightlines in the area;
- This alternative would result in unavoidable impacts to persons and property from flooding. More people would be affected since there are more houses in this alternative;
- This alternative would result in similar, or perhaps slightly increased, impacts to public services in the area (schools, police, fire, emergency medical services, recreation) as the proposed project;
- Circulation impacts on Hwy. 6 could increase. There would an increased number of houses and people. However, the S-curve would slow traffic as it approached Hwy. 6 and the elimination of one intersection with Hwy. 6 in the community of Chalfant would reduce turn conflicts:
- Dust erosion impacts to soils and air quality would probably remain similar to those for the proposed project;
- Traffic noise impacts to the housing developed on the project site would remain the same as for the proposed project;
- Impacts to water quality and quantity would probably remain similar to those for the proposed project;
- This alternative would still result in fire hazards to the proposed housing; and
- Some impacts to other resources that were not identified as potentially significant could increase (i.e., irrigation use at the park).

This would meet the project objectives of providing additional residential and commercial space and would meet concerns about additional park space.

V. IMPACT OVERVIEW

SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

The DEIR identifies two potentially significant unavoidable environmental effects of the project that cannot be reduced to a less-than-significant level; mitigation measures proposed in the DEIR will reduce these impacts to the lowest feasible levels.

3. Visual Resources; and
4. Hazards—flooding.

The DEIR identifies seven potentially significant environmental effects of the project that, with mitigation, can be reduced to less-than-significant levels.

3. Public Service Impacts (schools, police, fire, emergency medical services, recreation);
4. Geology/Soils Impacts;
3. Circulation Impacts (turn volume increases and safety concerns);
4. Noise Impacts;
5. Air Quality Impacts;
6. Water Resource Impacts; and
7. Hazards—fire.

All other impact areas are not potentially significant; mitigation measures are proposed in the DEIR for several of these impact areas to reduce impacts to even lower levels.

SIGNIFICANT UNAVOIDABLE ENVIRONMENTAL EFFECTS

There would be two significant environmental effect of the project that are unavoidable and that could not be reduced to less-than-significant levels; mitigation measures proposed in the DEIR would reduce potential impacts to the lowest feasible levels.

The project would result in unavoidable impacts to Visual Resources due to the flat, open nature of the project site and the long sight lines in the area. It would also result in unavoidable impacts due to flooding. Flooding impacts to structures can be mitigated. Flooding on site could result in damage to streets, to people caught outside, to property on the streets or stored outside. Flooding on site could also potentially create off-site impacts if the streets on site channeled the flood flow. These impacts are considered to be significant, unavoidable impacts of the project.

SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The project would result in the conversion of 29 acres of previously disturbed sagebrush scrub to housing, roads, and small-scale commercial development. The project would utilize on-site septic systems and wells. Once the site is developed with residential uses it is unlikely that those uses

would change. The site has been used in the past for agriculture; it is unlikely that the housing would be removed in the future so that the site could be used again for agriculture.

This change is not significant, however, because the site is designated for residential uses in the Mono County General Plan, it is adjacent to existing residential and commercial development in Chalfant, and is adjacent to existing, paved roads (Hwy. 6, Chalfant Road). It is not adjacent to other parcels designated for agriculture.

GROWTH-INDUCING IMPACTS

An EIR must discuss the ways in which a project "… could foster economic or population growth, or the construction of additional housing, either directly or indirectly in the surrounding environment" (CEQA Guidelines Section 15126.2 d). The proposed subdivision and commercial development would create 47 permanent households and 120 permanent residents in Chalfant. This would result in a 25% increase over Chalfant's population of 465 persons in 2000 and a 13% increase over the Tri-Valley population of 954 persons in 2000. The growth in population will create impacts to schools, to public services (fire, police, emergency medical services), and to county services such as libraries, parks and recreational facilities, and administrative services. The extent of those impacts is difficult to gauge since it is unknown how many residents will move from other areas of the county and how many will be newcomers.

Impacts of this growth are discussed in applicable sections of the DEIR (e.g. circulation, public services, noise, etc.). The Mountain Vistas Specific Plan has policies that require the development to contribute its fair share to the improvement of parks and recreational facilities and to the provision of additional police and emergency medical services. Impacts to libraries will be mitigated through property taxes. Impacts to schools and fire protection services will be mitigated through the collection of impact fees at the time of development.

Chalfant is primarily a residential community with extremely limited commercial and agricultural facilities and no industrial or manufacturing sites. As data from the 2000 Census indicate, most workers in Chalfant commute to jobs outside Chalfant, primarily in Bishop and Mammoth Lakes.

The proposed development will create jobs during the initial construction phases of the development. However, since the housing is manufactured housing built elsewhere and assembled on site, the number of jobs will be fewer and will last for a shorter period of time than if the housing was conventional stick-built housing. It is anticipated that short-term construction-related jobs will be absorbed by existing employees from Mono County and Bishop and that the construction phases of the development will not increase the local population by increasing employment opportunities. Similarly, the development will not create additional demand for housing as a result of increasing employment opportunities since construction jobs will be taken by existing residents of the area.

Residential development may also create a limited amount of employment to provide support services for the development such as home repairs, landscape services, cleaning services, etc. These activities will create a need for supplies and jobs in these sectors. In addition, residents of the development will create a demand for goods and services such as household goods, clothing, recreation, transportation needs, utility needs, etc. The increased demand for those services will create additional job opportunities. It is likely that most of the demand for goods and services

will be met by existing businesses and employees, primarily in Bishop, and that the project will not create the need for additional housing for employees.
The commercial development will create jobs but the number and type of jobs are unknown at this time. Since the commercial uses will be small and focused on meeting local needs, they are not anticipated to create many jobs. It is anticipated that jobs created by the commercial unit will be taken by local residents of the area and that the commercial units will not increase the local population by increasing employment opportunities or create an additional demand for housing as a result of increasing employment opportunities.

CUMULATIVE IMPACTS

Cumulative impact analysis in an EIR must consider "reasonably foreseeable" projects in the general vicinity. Reasonably foreseeable projects in the general vicinity of the Mountains Vistas Specific Plan include:

- The Ranches at Osage Circle: A 15-lot subdivision located approximately one-quarter mile west of the project site on Chalfant Road. The lots are one acre in size with individual septic systems and an on-site community water system.
- Wofford: A 17-lot subdivision located approximately 1.5 miles north of the project site.
- White Mountain Estates: A 45- to 50-lot subdivision located approximately 2 miles south of the project site.

Cumulative analysis requires the evaluation of "cumulatively considerable" impacts, defined by CEQA as "the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects …" [CEQA Section 15065(c)].

Land Use Cumulative Impacts. All of the projects are in areas planned for future development in the Mono County General Plan. No new land is proposed for development; cumulatively considerable land use impacts are not anticipated.

Population, Housing, and Employment Cumulative Impacts. All of the proposed development is residential development that will add housing to the area and increase the population. The small-scale commercial development proposed in the Mountain Vistas Specific Plan is focused on meeting local needs and is not anticipated to create many jobs. Residential development in the Chalfant area is not anticipated to create cumulatively considerable impacts to population, housing, or employment.

Public Services Cumulative Impacts. The Mountain Vistas Specific Plan with the three other foreseeable projects in the area could increase the Chalfant area population by an estimated 330 residents. This will require additional general governmental services, law enforcement services fire protection services, emergency medical services, and schools. This impact is cumulatively considerable and potentially significant. Mitigation measures in the Mountain Vistas Specific Plan reduce impacts to public services to less-than-significant levels.

Geology and Soils Cumulative Impacts. Although continued development in a geologically active region may have long-term adverse environmental effects, projects must meet seismic design standards in all new construction so geologic impacts are not considered cumulatively

considerable. Soil erosion from development may be cumulatively considerable and potentially significant without mitigation. Mitigation measures are expected to reduce impacts to less-than-significant levels.

Vegetation and Wildlife Cumulative Impacts. The Chalfant area does not provide habitat for sensitive status species or significant mule deer habitat. Development of the Mountain Vistas Specific Plan and the three reasonably foreseeable projects in the area is not anticipated to create cumulatively significant impacts to wildlife. Vegetation in the area is predominantly sagebrush and desert scrub, common and widespread vegetation types throughout the Eastern Sierra and the Great Basin. Development is not anticipated to create cumulative considerable impacts to vegetation.

Visual Resource Cumulative Impacts. The Tri-Valley area, including Chalfant, is extremely open, with long sight lines and low-lying vegetation. Development of the Mountain Vistas Specific Plan and the three reasonably foreseeable projects will result in considerable visual impacts. Cumulative visual resource impacts are considered significant and unavoidable, although mitigation can reduce these impacts to the lowest feasible levels.

Cultural Resource Cumulative Impacts. Cultural resources have been surveyed for the White Mountain Estates Specific Plan; surveys are anticipated for the other sites. The potential for cumulative cultural resource impacts is considered low; mitigation measures can reduce cumulative impacts to less-than-significant levels.

Circulation Cumulative Impacts. Cumulative increases in traffic will occur with the Mountain Vistas Specific Plan and the three other projects. Hwy. 6 has the capacity to handle those traffic increases. Access improvements to Hwy. 6 related to each project will occur as the projects are developed. Circulation impacts will not be cumulatively significant.

Noise Cumulative Impacts. There are no sensitive noise receptors in the Chalfant area other than residential development. Two of the projects are located over one mile away from the developed community area in Chalfant. The remaining two projects are located on the west side of Hwy. 6, in what is a primarily undeveloped area of Chalfant. Increased traffic noise from the projects will be the only significant noise impact. It will not be cumulatively considerable since the projects are not located adjacent to each other and most of the housing in Chalfant is located away from Hwy. 6, the main transportation corridor in the area.

Air Quality Cumulative Impacts. Although cumulative fugitive dust and other construction emissions could contribute to regional PM_{10} degradation, those emissions are regulated by the Great Basin Unified Air Pollution Control District; requiring EPA Phase II wood-burning appliances will also reduce cumulative effects. There should be no significant cumulative or regional PM_{10} degradation.

Water Resources Cumulative Impacts. There is the potential for significant cumulative effects on water quantity. All of the proposed projects will pump water from the aquifer underlying the Chalfant area. Based on the information available, the future impacts of that pumping are not clear. In addition, all of the proposed projects have individual septic systems. Based on the information available, the future water quality impacts of additional septic systems are not clear.

Energy and Resource Conservation Cumulative Impacts. Taken together, the projects are small-scale energy users. Energy supplies are expected to be plentiful well into the future and energy

conservation measures are routinely required in new construction. No significant cumulative impacts are expected.

VI. MITIGATION MONITORING PROGRAM

Mitigation measures proposed for the Mountain Vistas Specific Plan have been incorporated into the policies and standards for the Specific Plan. The Compliance Checklist for the Mountain Vistas Specific Plan will incorporate mitigation measures approved for the DEIR.

Over the life of the project, the Community Development Department (Planning, Building, Code Enforcement) will utilize the Compliance Checklist for the Mountain Vistas Specific Plan to ensure that all Specific Plan and DEIR requirements, including approved mitigation measures, are met at the appropriate phase of the development. ***The Compliance Checklist on the following page is currently a sample only.*** Following adoption of the Specific Plan, the final checklist will be completed and will integrate all development requirements from the Mountain Vistas Specific Plan including the Specific Plan policies, standards, and diagrams, the mitigation measures proposed in the EIR, and conditions of approval for the tract map.

The final checklist will be maintained as a separate file for the project and will be consulted throughout the life of the project to ensure that development occurs in compliance with the provisions of the Specific Plan and the DEIR.

Compliance Checklist: Mountain Vistas Specific Plan

(A copy of pertinent permits or approvals should be attached to this checklist.)
(This checklist addresses compliance for the Mountain Vistas Specific Plan, including Specific Plan policies and standards, Tract Map conditions of approval, and mitigation measures from the EIR).

Project Benchmark: Prior to Approval of Final Tract Map

Approvals/Permits/Mitigation Required	Monitoring Dept	Contact for Compliance	Date Completed	Staff Initials	Notes
1. Will serve letter from Chalfant FPD	CDD	Workforce Homebuilders LLC			
2. Well permit	CDD	Workforce Homebuilders LLC			
3. Septic system permit	CDD	Workforce Homebuilders LLC			
4. Encroachment permit from Caltrans	CDD	Workforce Homebuilders LLC			
5. Encroachment permit from Mono County	CDD	Workforce Homebuilders LLC			
6. Grading permit	CDD	Workforce Homebuilders LLC			
7. SWWPP	CDD	Workforce Homebuilders LLC			

VII. REFERENCES

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Persons Consulted

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Nate Greenberg, Partner

U.S. Geological Survey
Dave Hill, Scientist-in-Charge, Long Valley Observatory

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Information on seismic hazards, landslide hazards, loss estimates for seismic events.
www.consrv.ca.gov/CGS

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www.ncdc.noaa.gov

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